SEQUENCE LISTING

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<120> METHODS OF DIAGNOSING CERVICAL CANCER

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<150> US 02/24655
<151> 2002-08-02

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<151> 2001-08-03

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<151> 2002-02-25

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<151> 2001-02-16

<150> 09/710,059
<151> 2000-11-10

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<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 87
<212> PRT
<213> Homo sapiens

<400> 1

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Arg Asp Met Ala Glu Ala His Lys Glu Ala Met Ser Arg Lys Leu Gly
 1               5                  10                  15
Gln Ser Glu Ser Gln Gly Pro Pro Arg Ala Phe Ala Lys Val Asn Ser
            20                  25                  30
Ile Ser Pro Gly Ser Pro Ser Ile Ala Gly Leu Gln Val Asp Asp Glu
        35                  40                  45
Ile Val Glu Phe Gly Ser Val Asn Thr Gln Asn Phe Gln Ser Leu His
    50                  55                  60
Asn Ile Gly Ser Val Val Gln His Ser Glu Gly Ala Leu Ala Pro Thr
65                  70                  75                  80
Ile Leu Leu Ser Val Ser Met
                85
```

<210> 2
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2
Leu Arg Lys Glu Pro Glu Ile Ile Thr Val Thr Leu Lys Lys Gln Asn
 1   5   10   15
Gly Met Gly Leu Ser Ile Val Ala Ala Lys Gly Ala Gly Gln Asp Lys
            20   25   30
Leu Gly Ile Tyr Val Lys Ser Val Val Lys Gly Gly Ala Ala Asp Val
        35   40   45
Asp Gly Arg Leu Ala Ala Gly Asp Gln Leu Leu Ser Val Asp Gly Arg
    50   55   60
Ser Leu Val Gly Leu Ser Gln Glu Arg Ala Ala Glu Leu Met Thr Arg
65   70   75   80
Thr Ser Ser Val Val Thr Leu Glu Val Ala Lys Gln Gly
                85   90

<210> 3
<211> 105
<212> PRT
<213> Homo sapiens

<400> 3
Leu Ile Arg Pro Ser Val Ile Ser Ile Ile Gly Leu Tyr Lys Glu Lys
 1   5   10   15
Gly Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Arg Asp Cys Ile Arg
            20   25   30
Gly Gln Met Gly Ile Phe Val Lys Thr Ile Phe Pro Asn Gly Ser Ala
        35   40   45
Ala Glu Asp Gly Arg Leu Lys Glu Gly Asp Glu Ile Leu Asp Val Asn
    50   55   60
Gly Ile Pro Ile Lys Gly Leu Thr Phe Gln Glu Ala Ile His Thr Phe
65   70   75   80
Lys Gln Ile Arg Ser Gly Leu Phe Val Leu Thr Val Arg Thr Lys Leu
                85   90   95
Val Ser Pro Ser Leu Thr Asn Ser Ser
            100   105

<210> 4
<211> 132
<212> PRT
<213> Homo sapiens

<400> 4
Gly Ile Ser Ser Leu Gly Arg Lys Thr Pro Gly Pro Lys Asp Arg Ile
 1   5   10   15
Val Met Glu Val Thr Leu Asn Lys Glu Pro Arg Val Gly Leu Gly Ile
            20   25   30
Gly Ala Cys Cys Leu Ala Leu Glu Asn Ser Pro Pro Gly Ile Tyr Ile
        35   40   45
His Ser Leu Ala Pro Gly Ser Val Ala Lys Met Glu Ser Asn Leu Ser
    50   55   60
Arg Gly Asp Gln Ile Leu Glu Val Asn Ser Val Asn Val Arg His Ala
65   70   75   80
Ala Leu Ser Lys Val His Ala Ile Leu Ser Lys Cys Pro Pro Gly Pro

```
                85                  90                  95
Val Arg Leu Val Ile Gly Arg His Pro Asn Pro Lys Val Ser Glu Gln
            100                 105                 110
Glu Met Asp Glu Val Ile Ala Arg Ser Thr Tyr Gln Glu Ser Lys Glu
        115                 120                 125
Ala Asn Ser Ser
    130
```

<210> 5
<211> 105
<212> PRT
<213> Homo sapiens

<400> 5

```
Gln Ser Glu Asn Glu Glu Asp Val Cys Phe Ile Val Leu Asn Arg Lys
 1               5                  10                  15
Glu Gly Ser Gly Leu Gly Phe Ser Val Ala Gly Gly Thr Asp Val Glu
            20                  25                  30
Pro Lys Ser Ile Thr Val His Arg Val Phe Ser Gln Gly Ala Ala Ser
        35                  40                  45
Gln Glu Gly Thr Met Asn Arg Gly Asp Phe Leu Leu Ser Val Asn Gly
    50                  55                  60
Ala Ser Leu Ala Gly Leu Ala His Gly Asn Val Leu Lys Val Leu His
65                  70                  75                  80
Gln Ala Gln Leu His Lys Asp Ala Leu Val Val Ile Lys Lys Gly Met
                85                  90                  95
Asp Gln Pro Arg Pro Ser Asn Ser Ser
            100                 105
```

<210> 6
<211> 101
<212> PRT
<213> Homo sapiens

<400> 6

```
Leu Gly Arg Ser Val Ala Val His Asp Ala Leu Cys Val Glu Val Leu
 1               5                  10                  15
Lys Thr Ser Ala Gly Leu Gly Leu Ser Leu Asp Gly Gly Lys Ser Ser
            20                  25                  30
Val Thr Gly Asp Gly Pro Leu Val Ile Lys Arg Val Tyr Lys Gly Gly
        35                  40                  45
Ala Ala Glu Gln Ala Gly Ile Ile Glu Ala Gly Asp Glu Ile Leu Ala
    50                  55                  60
Ile Asn Gly Lys Pro Leu Val Gly Leu Met His Phe Asp Ala Trp Asn
65                  70                  75                  80
Ile Met Lys Ser Val Pro Glu Gly Pro Val Gln Leu Leu Ile Arg Lys
                85                  90                  95
His Arg Asn Ser Ser
            100
```

<210> 7
<211> 74
<212> PRT
<213> Homo sapiens

<400> 7

```
Gln Thr Val Ile Leu Pro Gly Pro Ala Ala Trp Gly Phe Arg Leu Ser
```

```
 1               5                  10                  15
Gly Gly Ile Asp Phe Asn Gln Pro Leu Val Ile Thr Arg Ile Thr Pro
            20                  25                  30
Gly Ser Lys Ala Ala Ala Ala Asn Leu Cys Pro Gly Asp Val Ile Leu
        35                  40                  45
Ala Ile Asp Gly Phe Gly Thr Glu Ser Met Thr His Ala Asp Gly Gln
    50                  55                  60
Asp Arg Ile Lys Ala Ala Glu Phe Ile Val
65                  70
```

<210> 8
<211> 85
<212> PRT
<213> Homo sapiens

<400> 8

```
Ile Leu Val Glu Val Gln Leu Ser Gly Gly Ala Pro Trp Gly Phe Thr
 1               5                  10                  15
Leu Lys Gly Gly Arg Glu His Gly Glu Pro Leu Val Ile Thr Lys Ile
            20                  25                  30
Glu Glu Gly Ser Lys Ala Ala Ala Val Asp Lys Leu Leu Ala Gly Asp
        35                  40                  45
Glu Ile Val Gly Ile Asn Asp Ile Gly Leu Ser Gly Phe Arg Gln Glu
    50                  55                  60
Ala Ile Cys Leu Val Lys Gly Ser His Lys Thr Leu Lys Leu Val Val
65                  70                  75                  80
Lys Arg Asn Ser Ser
                85
```

<210> 9
<211> 104
<212> PRT
<213> Homo sapiens

<400> 9

```
Arg Glu Lys Pro Leu Phe Thr Arg Asp Ala Ser Gln Leu Lys Gly Thr
 1               5                  10                  15
Phe Leu Ser Thr Thr Leu Lys Lys Ser Asn Met Gly Phe Gly Phe Thr
            20                  25                  30
Ile Ile Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Val Lys Ser Val
        35                  40                  45
Ile Pro Asp Gly Pro Ala Ala Gln Asp Gly Lys Met Glu Thr Gly Asp
    50                  55                  60
Val Ile Val Tyr Ile Asn Glu Val Cys Val Leu Gly His Thr His Ala
65                  70                  75                  80
Asp Val Val Lys Leu Phe Gln Ser Val Pro Ile Gly Gln Ser Val Asn
                85                  90                  95
Leu Val Leu Cys Arg Gly Tyr Pro
            100
```

<210> 10
<211> 91
<212> PRT
<213> Homo sapiens

<400> 10

```
Leu Ser Gly Ala Thr Gln Ala Glu Leu Met Thr Leu Thr Ile Val Lys
```

```
 1               5                  10                  15
Gly Ala Gln Gly Phe Gly Phe Thr Ile Ala Asp Ser Pro Thr Gly Gln
            20                  25                  30
Arg Val Lys Gln Ile Leu Asp Ile Gln Gly Cys Pro Gly Leu Cys Glu
        35                  40                  45
Gly Asp Leu Ile Val Glu Ile Asn Gln Gln Asn Val Gln Asn Leu Ser
    50                  55                  60
His Thr Glu Val Val Asp Ile Leu Lys Asp Cys Pro Ile Gly Ser Glu
65                  70                  75                  80
Thr Ser Leu Ile Ile His Arg Gly Gly Phe Phe
                85                  90
```

<210> 11
<211> 93
<212> PRT
<213> Homo sapiens

<400> 11

```
His Tyr Lys Glu Leu Asp Val His Leu Arg Arg Met Glu Ser Gly Phe
 1               5                  10                  15
Gly Phe Arg Ile Leu Gly Gly Asp Glu Pro Gly Gln Pro Ile Leu Ile
            20                  25                  30
Gly Ala Val Ile Ala Met Gly Ser Ala Asp Arg Asp Gly Arg Leu His
        35                  40                  45
Pro Gly Asp Glu Leu Val Tyr Val Asp Gly Ile Pro Val Ala Gly Lys
    50                  55                  60
Thr His Arg Tyr Val Ile Asp Leu Met His His Ala Ala Arg Asn Gly
65                  70                  75                  80
Gln Val Asn Leu Thr Val Arg Arg Lys Val Leu Cys Gly
                85                  90
```

<210> 12
<211> 106
<212> PRT
<213> Homo sapiens

<400> 12

```
Glu Gly Arg Gly Ile Ser Ser His Ser Leu Gln Thr Ser Asp Ala Val
 1               5                  10                  15
Ile His Arg Lys Glu Asn Glu Gly Phe Gly Phe Val Ile Ile Ser Ser
            20                  25                  30
Leu Asn Arg Pro Glu Ser Gly Ser Thr Ile Thr Val Pro His Lys Ile
        35                  40                  45
Gly Arg Ile Ile Asp Gly Ser Pro Ala Asp Arg Cys Ala Lys Leu Lys
    50                  55                  60
Val Gly Asp Arg Ile Leu Ala Val Asn Gly Gln Ser Ile Ile Asn Met
65                  70                  75                  80
Pro His Ala Asp Ile Val Lys Leu Ile Lys Asp Ala Gly Leu Ser Val
                85                  90                  95
Thr Leu Arg Ile Ile Pro Gln Glu Glu Leu
            100                 105
```

<210> 13
<211> 98
<212> PRT
<213> Homo sapiens

<400> 13
Leu Ser Asp Tyr Arg Gln Pro Gln Asp Phe Asp Tyr Phe Thr Val Asp
 1   5   10   15
Met Glu Lys Gly Ala Lys Gly Phe Gly Phe Ser Ile Arg Gly Gly Arg
            20   25   30
Glu Tyr Lys Met Asp Leu Tyr Val Leu Arg Leu Ala Glu Asp Gly Pro
        35   40   45
Ala Ile Arg Asn Gly Arg Met Arg Val Gly Asp Gln Ile Ile Glu Ile
    50   55   60
Asn Gly Glu Ser Thr Arg Asp Met Thr His Ala Arg Ala Ile Glu Leu
65   70   75   80
Ile Lys Ser Gly Gly Arg Arg Val Arg Leu Leu Leu Lys Arg Gly Thr
                85   90   95
Gly Gln

<210> 14
<211> 90
<212> PRT
<213> Homo sapiens

<400> 14
His Glu Ser Val Ile Gly Arg Asn Pro Glu Gly Gln Leu Gly Phe Glu
 1   5   10   15
Leu Lys Gly Gly Ala Glu Asn Gly Gln Phe Pro Tyr Leu Gly Glu Val
            20   25   30
Lys Pro Gly Lys Val Ala Tyr Glu Ser Gly Ser Lys Leu Val Ser Glu
        35   40   45
Glu Leu Leu Leu Glu Val Asn Glu Thr Pro Val Ala Gly Leu Thr Ile
    50   55   60
Arg Asp Val Leu Ala Val Ile Lys His Cys Lys Asp Pro Leu Arg Leu
65   70   75   80
Lys Cys Val Lys Gln Gly Gly Ile His Arg
                85   90

<210> 15
<211> 126
<212> PRT
<213> Homo sapiens

<400> 15
Asn Leu Met Phe Arg Lys Phe Ser Leu Glu Arg Pro Phe Arg Pro Ser
 1   5   10   15
Val Thr Ser Val Gly His Val Arg Gly Pro Gly Pro Ser Val Gln His
            20   25   30
Thr Thr Leu Asn Gly Asp Ser Leu Thr Ser Gln Leu Thr Leu Leu Gly
        35   40   45
Gly Asn Ala Arg Gly Ser Phe Val His Ser Val Lys Pro Gly Ser Leu
    50   55   60
Ala Glu Lys Ala Gly Leu Arg Glu Gly His Gln Leu Leu Leu Leu Glu
65   70   75   80
Gly Cys Ile Arg Gly Glu Arg Gln Ser Val Pro Leu Asp Thr Cys Thr
                85   90   95
Lys Glu Glu Ala His Trp Thr Ile Gln Arg Cys Ser Gly Pro Val Thr
            100   105   110
Leu His Tyr Lys Val Asn His Glu Gly Tyr Arg Lys Leu Val
        115   120   125

<210> 16
<211> 100
<212> PRT
<213> Homo sapiens

<400> 16
Ile Leu Ser Gln Val Thr Met Leu Ala Phe Gln Gly Asp Ala Leu Leu
 1   5   10   15
Glu Gln Ile Ser Val Ile Gly Gly Asn Leu Thr Gly Ile Phe Ile His
            20   25   30
Arg Val Thr Pro Gly Ser Ala Ala Asp Gln Met Ala Leu Arg Pro Gly
        35   40   45
Thr Gln Ile Val Met Val Asp Tyr Glu Ala Ser Glu Pro Leu Phe Lys
    50   55   60
Ala Val Leu Glu Asp Thr Thr Leu Glu Glu Ala Val Gly Leu Leu Arg
65   70   75   80
Arg Val Asp Gly Phe Cys Cys Leu Ser Val Lys Val Asn Thr Asp Gly
                85   90   95
Tyr Lys Arg Leu
            100

<210> 17
<211> 90
<212> PRT
<213> Homo sapiens

<400> 17
Thr Arg Val Arg Leu Val Gln Phe Gln Lys Asn Thr Asp Glu Pro Met
 1   5   10   15
Gly Ile Thr Leu Lys Met Asn Glu Leu Asn His Cys Ile Val Ala Arg
            20   25   30
Ile Met His Gly Gly Met Ile His Arg Gln Gly Thr Leu His Val Gly
        35   40   45
Asp Glu Ile Arg Glu Ile Asn Gly Ile Ser Val Ala Asn Gln Thr Val
    50   55   60
Glu Gln Leu Gln Lys Met Leu Arg Glu Met Arg Gly Ser Ile Thr Phe
65   70   75   80
Lys Ile Val Pro Ser Tyr Arg Thr Gln Ser
                85   90

<210> 18
<211> 88
<212> PRT
<213> Homo sapiens

<400> 18
Leu Glu Gln Lys Ala Val Leu Glu Gln Val Gln Leu Asp Ser Pro Leu
 1   5   10   15
Gly Leu Glu Ile His Thr Thr Ser Asn Cys Gln His Phe Val Ser Gln
            20   25   30
Val Asp Thr Gln Val Pro Thr Asp Ser Arg Leu Gln Ile Gln Pro Gly
        35   40   45
Asp Glu Val Val Gln Ile Asn Glu Gln Val Val Val Gly Trp Pro Arg
    50   55   60
Lys Asn Met Val Arg Glu Leu Leu Arg Glu Pro Ala Gly Leu Ser Leu
65   70   75   80
Val Leu Lys Lys Ile Pro Ile Pro

<210> 19
<211> 92
<212> PRT
<213> Homo sapiens

<400> 19
Gln Arg Lys Leu Val Thr Val Glu Lys Gln Asp Asn Glu Thr Phe Gly
1 5 10 15
Phe Glu Ile Gln Ser Tyr Arg Pro Gln Asn Gln Asn Ala Cys Ser Ser
20 25 30
Glu Met Phe Thr Leu Ile Cys Lys Ile Gln Glu Asp Ser Pro Ala His
35 40 45
Cys Ala Gly Leu Gln Ala Gly Asp Val Leu Ala Asn Ile Asn Gly Val
50 55 60
Ser Thr Glu Gly Phe Thr Tyr Lys Gln Val Val Asp Leu Ile Arg Ser
65 70 75 80
Ser Gly Asn Leu Leu Thr Ile Glu Thr Leu Asn Gly
85 90

<210> 20
<211> 109
<212> PRT
<213> Homo sapiens

<400> 20
Arg Cys Leu Ile Gln Thr Lys Gly Gln Arg Ser Met Asp Gly Tyr Pro
1 5 10 15
Glu Gln Phe Cys Val Arg Ile Glu Lys Asn Pro Gly Leu Gly Phe Ser
20 25 30
Ile Ser Gly Gly Ile Ser Gly Gln Gly Asn Pro Phe Lys Pro Ser Asp
35 40 45
Lys Gly Ile Phe Val Thr Arg Val Gln Pro Asp Gly Pro Ala Ser Asn
50 55 60
Leu Leu Gln Pro Gly Asp Lys Ile Leu Gln Ala Asn Gly His Ser Phe
65 70 75 80
Val His Met Glu His Glu Lys Ala Val Leu Leu Leu Lys Ser Phe Gln
85 90 95
Asn Thr Val Asp Leu Val Ile Gln Arg Glu Leu Thr Val
100 105

<210> 21
<211> 101
<212> PRT
<213> Homo sapiens

<400> 21
Ile Gln Val Asn Gly Thr Asp Ala Asp Tyr Glu Tyr Glu Glu Ile Thr
1 5 10 15
Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly Gly Thr
20 25 30
Asp Asn Pro His Ile Gly Asp Asp Ser Ser Ile Phe Ile Thr Lys Ile
35 40 45
Ile Thr Gly Gly Ala Ala Ala Gln Asp Gly Arg Leu Arg Val Asn Asp
50 55 60
Cys Ile Leu Gln Val Asn Glu Val Asp Val Arg Asp Val Thr His Ser

65 70 75 80
Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile Val Arg Leu Tyr
85 90 95
Val Lys Arg Arg Asn
100

<210> 22
<211> 95
<212> PRT
<213> Homo sapiens

<400> 22
Ile Gln Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly
1 5 10 15
Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr
20 25 30
Lys Ile Ile Glu Gly Gly Ala Ala His Lys Asp Gly Lys Leu Gln Ile
35 40 45
Gly Asp Lys Leu Leu Ala Val Asn Asn Val Cys Leu Glu Glu Val Thr
50 55 60
His Glu Glu Ala Val Thr Ala Leu Lys Asn Thr Ser Asp Phe Val Tyr
65 70 75 80
Leu Lys Val Ala Lys Pro Thr Ser Met Tyr Met Asn Asp Gly Asn
85 90 95

<210> 23
<211> 85
<212> PRT
<213> Homo sapiens

<400> 23
Ile Leu His Arg Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly Gly
1 5 10 15
Glu Asp Gly Glu Gly Ile Phe Ile Ser Phe Ile Leu Ala Gly Gly Pro
20 25 30
Ala Asp Leu Ser Gly Glu Leu Arg Lys Gly Asp Arg Ile Ile Ser Val
35 40 45
Asn Ser Val Asp Leu Arg Ala Ala Ser His Glu Gln Ala Ala Ala Ala
50 55 60
Leu Lys Asn Ala Gly Gln Ala Val Thr Ile Val Ala Gln Tyr Arg Pro
65 70 75 80
Glu Glu Tyr Ser Arg
85

<210> 24
<211> 101
<212> PRT
<213> Homo sapiens

<400> 24
Ile Ser Tyr Val Asn Gly Thr Glu Ile Glu Tyr Glu Phe Glu Glu Ile
1 5 10 15
Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly Gly
20 25 30
Thr Asp Asn Pro His Ile Gly Asp Asp Pro Gly Ile Phe Ile Thr Lys
35 40 45
Ile Ile Pro Gly Gly Ala Ala Ala Glu Asp Gly Arg Leu Arg Val Asn

```
    50                  55                  60
Asp Cys Ile Leu Arg Val Asn Glu Val Asp Val Ser Glu Val Ser His
65                  70                  75                  80
Ser Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile Val Arg Leu
                85                  90                  95
Tyr Val Arg Arg Arg
            100


<210> 25
<211> 94
<212> PRT
<213> Homo sapiens

<400> 25
Ile Ser Val Val Glu Ile Lys Leu Phe Lys Gly Pro Lys Gly Leu Gly
 1               5                  10                  15
Phe Ser Ile Ala Gly Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn
            20                  25                  30
Ser Ile Tyr Val Thr Lys Ile Ile Asp Gly Gly Ala Ala Gln Lys Asp
        35                  40                  45
Gly Arg Leu Gln Val Gly Asp Arg Leu Leu Met Val Asn Asn Tyr Ser
    50                  55                  60
Leu Glu Glu Val Thr His Glu Glu Ala Val Ala Ile Leu Lys Asn Thr
65                  70                  75                  80
Ser Glu Val Val Tyr Leu Lys Val Gly Asn Pro Thr Thr Ile
                85                  90


<210> 26
<211> 95
<212> PRT
<213> Homo sapiens

<400> 26
Ile Trp Ala Val Ser Leu Glu Gly Glu Pro Arg Lys Val Val Leu His
 1               5                  10                  15
Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly Gly Glu Asp Gly
            20                  25                  30
Glu Gly Ile Phe Val Ser Phe Ile Leu Ala Gly Gly Pro Ala Asp Leu
        35                  40                  45
Ser Gly Glu Leu Gln Arg Gly Asp Gln Ile Leu Ser Val Asn Gly Ile
    50                  55                  60
Asp Leu Arg Gly Ala Ser His Glu Gln Ala Ala Ala Ala Leu Lys Gly
65                  70                  75                  80
Ala Gly Gln Thr Val Thr Ile Ile Ala Gln Tyr Gln Pro Glu Asp
                85                  90                  95


<210> 27
<211> 102
<212> PRT
<213> Homo sapiens

<400> 27
Gly Ile Pro Tyr Val Glu Glu Pro Arg His Val Lys Val Gln Lys Gly
 1               5                  10                  15
Ser Glu Pro Leu Gly Ile Ser Ile Val Ser Gly Glu Lys Gly Gly Ile
            20                  25                  30
Tyr Val Ser Lys Val Thr Val Gly Ser Ile Ala His Gln Ala Gly Leu
```

```
        35                  40                  45
Glu Tyr Gly Asp Gln Leu Leu Glu Phe Asn Gly Ile Asn Leu Arg Ser
    50                  55                  60
Ala Thr Glu Gln Gln Ala Arg Leu Ile Ile Gly Gln Gln Cys Asp Thr
65                  70                  75                  80
Ile Thr Ile Leu Ala Gln Tyr Asn Pro His Val His Gln Leu Arg Asn
                85                  90                  95
Ser Ser Glx Leu Thr Asp
            100
```

<210> 28
<211> 103
<212> PRT
<213> Homo sapiens

<400> 28

```
Gly Ile Leu Ala Gly Asp Ala Asn Lys Lys Thr Leu Glu Pro Arg Val
 1               5                  10                  15
Val Phe Ile Lys Lys Ser Gln Leu Glu Leu Gly Val His Leu Cys Gly
            20                  25                  30
Gly Asn Leu His Gly Val Phe Val Ala Glu Val Glu Asp Asp Ser Pro
        35                  40                  45
Ala Lys Gly Pro Asp Gly Leu Val Pro Gly Asp Leu Ile Leu Glu Tyr
    50                  55                  60
Gly Ser Leu Asp Val Arg Asn Lys Thr Val Glu Glu Val Tyr Val Glu
65                  70                  75                  80
Met Leu Lys Pro Arg Asp Gly Val Arg Leu Lys Val Gln Tyr Arg Pro
                85                  90                  95
Glu Glu Phe Ile Val Thr Asp
            100
```

<210> 29
<211> 141
<212> PRT
<213> Homo sapiens

<400> 29

```
Pro Thr Ser Pro Glu Ile Gln Glu Leu Arg Gln Met Leu Gln Ala Pro
 1               5                  10                  15
His Phe Lys Ala Leu Leu Ser Ala His Asp Thr Ile Ala Gln Lys Asp
            20                  25                  30
Phe Glu Pro Leu Leu Pro Pro Leu Pro Asp Asn Ile Pro Glu Ser Glu
        35                  40                  45
Glu Ala Met Arg Ile Val Cys Leu Val Lys Asn Gln Gln Pro Leu Gly
    50                  55                  60
Ala Thr Ile Lys Arg His Glu Met Thr Gly Asp Ile Leu Val Ala Arg
65                  70                  75                  80
Ile Ile His Gly Gly Leu Ala Glu Arg Ser Gly Leu Leu Tyr Ala Gly
                85                  90                  95
Asp Lys Leu Val Glu Val Asn Gly Val Ser Val Glu Gly Leu Asp Pro
            100                 105                 110
Glu Gln Val Ile His Ile Leu Ala Met Ser Arg Gly Thr Ile Met Phe
        115                 120                 125
Lys Val Val Pro Val Ser Asp Pro Pro Val Asn Ser Ser
    130                 135                 140
```

<210> 30

<211> 97
<212> PRT
<213> Homo sapiens

<400> 30
Pro Thr Ser Pro Glu Ile Gln Glu Leu Arg Gln Met Leu Gln Ala Pro
 1   5   10   15
His Phe Lys Gly Ala Thr Ile Lys Arg His Glu Met Thr Gly Asp Ile
            20   25   30
Leu Val Ala Arg Ile Ile His Gly Gly Leu Ala Glu Arg Ser Gly Leu
        35   40   45
Leu Tyr Ala Gly Asp Lys Leu Val Glu Val Asn Gly Val Ser Val Glu
    50   55   60
Gly Leu Asp Pro Glu Gln Val Ile His Ile Leu Ala Met Ser Arg Gly
65   70   75   80
Thr Ile Met Phe Lys Val Val Pro Val Ser Asp Pro Pro Val Asn Ser
                85   90   95
Ser

<210> 31
<211> 93
<212> PRT
<213> Homo sapiens

<400> 31
Leu Asn Ile Val Thr Val Thr Leu Asn Met Glu Arg His His Phe Leu
 1   5   10   15
Gly Ile Ser Ile Val Gly Gln Ser Asn Asp Arg Gly Asp Gly Gly Ile
            20   25   30
Tyr Ile Gly Ser Ile Met Lys Gly Gly Ala Val Ala Ala Asp Gly Arg
        35   40   45
Ile Glu Pro Gly Asp Met Leu Leu Gln Val Asn Asp Val Asn Phe Glu
    50   55   60
Asn Met Ser Asn Asp Asp Ala Val Arg Val Leu Arg Glu Ile Val Ser
65   70   75   80
Gln Thr Gly Pro Ile Ser Leu Thr Val Ala Lys Cys Trp
                85   90

<210> 32
<211> 100
<212> PRT
<213> Homo sapiens

<400> 32
Leu Asn Ile Ile Thr Val Thr Leu Asn Met Glu Lys Tyr Asn Phe Leu
 1   5   10   15
Gly Ile Ser Ile Val Gly Gln Ser Asn Glu Arg Gly Asp Gly Gly Ile
            20   25   30
Tyr Ile Gly Ser Ile Met Lys Gly Gly Ala Val Ala Ala Asp Gly Arg
        35   40   45
Ile Glu Pro Gly Asp Met Leu Leu Gln Val Asn Asp Met Asn Phe Glu
    50   55   60
Asn Met Ser Asn Asp Asp Ala Val Arg Val Leu Arg Asp Ile Val His
65   70   75   80
Lys Pro Gly Pro Ile Val Leu Thr Val Ala Lys Cys Trp Asp Pro Ser
                85   90   95
Pro Gln Asn Ser

100

<210> 33
<211> 95
<212> PRT
<213> Homo sapiens

<400> 33
Ile Ile Thr Val Thr Leu Asn Met Glu Lys Tyr Asn Phe Leu Gly Ile
1 5 10 15
Ser Ile Val Gly Gln Ser Asn Glu Arg Gly Asp Gly Gly Ile Tyr Ile
20 25 30
Gly Ser Ile Met Lys Gly Gly Ala Val Ala Ala Asp Gly Arg Ile Glu
35 40 45
Pro Gly Asp Met Leu Leu Gln Val Asn Glu Ile Asn Phe Glu Asn Met
50 55 60
Ser Asn Asp Asp Ala Val Arg Val Leu Arg Glu Ile Val His Lys Pro
65 70 75 80
Gly Pro Ile Thr Leu Thr Val Ala Lys Cys Trp Asp Pro Ser Pro
85 90 95

<210> 34
<211> 92
<212> PRT
<213> Homo sapiens

<400> 34
Thr Thr Gln Gln Ile Asp Leu Gln Gly Pro Gly Pro Trp Gly Phe Arg
1 5 10 15
Leu Val Gly Arg Lys Asp Phe Glu Gln Pro Leu Ala Ile Ser Arg Val
20 25 30
Thr Pro Gly Ser Lys Ala Ala Leu Ala Asn Leu Cys Ile Gly Asp Val
35 40 45
Ile Thr Ala Ile Asp Gly Glu Asn Thr Ser Asn Met Thr His Leu Glu
50 55 60
Ala Gln Asn Arg Ile Lys Gly Cys Thr Asp Asn Leu Thr Leu Thr Val
65 70 75 80
Ala Arg Ser Glu His Lys Val Trp Ser Pro Leu Val
85 90

<210> 35
<211> 89
<212> PRT
<213> Homo sapiens

<400> 35
Ile Phe Met Asp Ser Phe Lys Val Val Leu Glu Gly Pro Ala Pro Trp
1 5 10 15
Gly Phe Arg Leu Gln Gly Gly Lys Asp Phe Asn Val Pro Leu Ser Ile
20 25 30
Ser Arg Leu Thr Pro Gly Gly Lys Ala Ala Gln Ala Gly Val Ala Val
35 40 45
Gly Asp Trp Val Leu Ser Ile Asp Gly Glu Asn Ala Gly Ser Leu Thr
50 55 60
His Ile Glu Ala Gln Asn Lys Ile Arg Ala Cys Gly Glu Arg Leu Ser
65 70 75 80
Leu Gly Leu Ser Arg Ala Gln Pro Val

85

<210> 36
<211> 100
<212> PRT
<213> Homo sapiens

<400> 36
Gln Gly His Glu Leu Ala Lys Gln Glu Ile Arg Val Arg Val Glu Lys
 1   5   10   15
Asp Pro Glu Leu Gly Phe Ser Ile Ser Gly Gly Val Gly Gly Arg Gly
            20   25   30
Asn Pro Phe Arg Pro Asp Asp Asp Gly Ile Phe Val Thr Arg Val Gln
        35   40   45
Pro Glu Gly Pro Ala Ser Lys Leu Leu Gln Pro Gly Asp Lys Ile Ile
    50   55   60
Gln Ala Asn Gly Tyr Ser Phe Ile Asn Ile Glu His Gly Gln Ala Val
65   70   75   80
Ser Leu Leu Lys Thr Phe Gln Asn Thr Val Glu Leu Ile Ile Val Arg
                85   90   95
Glu Val Ser Ser
            100

<210> 37
<211> 87
<212> PRT
<213> Homo sapiens

<400> 37
Ile Leu Cys Cys Leu Glu Lys Gly Pro Asn Gly Tyr Gly Phe His Leu
 1   5   10   15
His Gly Glu Lys Gly Lys Leu Gly Gln Tyr Ile Arg Leu Val Glu Pro
            20   25   30
Gly Ser Pro Ala Glu Lys Ala Gly Leu Leu Ala Gly Asp Arg Leu Val
        35   40   45
Glu Val Asn Gly Glu Asn Val Glu Lys Glu Thr His Gln Gln Val Val
    50   55   60
Ser Arg Ile Arg Ala Ala Leu Asn Ala Val Arg Leu Leu Val Val Asp
65   70   75   80
Pro Glu Phe Ile Val Thr Asp
                85

<210> 38
<211> 92
<212> PRT
<213> Homo sapiens

<400> 38
Ile Arg Leu Cys Thr Met Lys Lys Gly Pro Ser Gly Tyr Gly Phe Asn
 1   5   10   15
Leu His Ser Asp Lys Ser Lys Pro Gly Gln Phe Ile Arg Ser Val Asp
            20   25   30
Pro Asp Ser Pro Ala Glu Ala Ser Gly Leu Arg Ala Gln Asp Arg Ile
        35   40   45
Val Glu Val Asn Gly Val Cys Met Glu Gly Lys Gln His Gly Asp Val
    50   55   60
Val Ser Ala Ile Arg Ala Gly Gly Asp Glu Thr Lys Leu Leu Val Val

65 70 75 80
Asp Arg Glu Thr Asp Glu Phe Phe Met Asn Ser Ser
85 90

<210> 39
<211> 107
<212> PRT
<213> Homo sapiens

<400> 39
Lys Asn Pro Ser Gly Glu Leu Lys Thr Val Thr Leu Ser Lys Met Lys
1 5 10 15
Gln Ser Leu Gly Ile Ser Ile Ser Gly Gly Ile Glu Ser Lys Val Gln
20 25 30
Pro Met Val Lys Ile Glu Lys Ile Phe Pro Gly Gly Ala Ala Phe Leu
35 40 45
Ser Gly Ala Leu Gln Ala Gly Phe Glu Leu Val Ala Val Asp Gly Glu
50 55 60
Asn Leu Glu Gln Val Thr His Gln Arg Ala Val Asp Thr Ile Arg Arg
65 70 75 80
Ala Tyr Arg Asn Lys Ala Arg Glu Pro Met Glu Leu Val Val Arg Val
85 90 95
Pro Gly Pro Ser Pro Arg Pro Ser Pro Ser Asp
100 105

<210> 40
<211> 97
<212> PRT
<213> Homo sapiens

<400> 40
Glu Gly His Ser His Pro Arg Val Val Glu Leu Pro Lys Thr Glu Glu
1 5 10 15
Gly Leu Gly Phe Asn Ile Met Gly Gly Lys Glu Gln Asn Ser Pro Ile
20 25 30
Tyr Ile Ser Arg Ile Ile Pro Gly Gly Ile Ala Asp Arg His Gly Gly
35 40 45
Leu Lys Arg Gly Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu
50 55 60
Gly Glu His His Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Gln Gly
65 70 75 80
Lys Val Lys Leu Val Val Arg Tyr Thr Pro Lys Val Leu Glu Glu Met
85 90 95
Glu

<210> 41
<211> 88
<212> PRT
<213> Homo sapiens

<400> 41
Pro Gly Ala Pro Tyr Ala Arg Lys Thr Phe Thr Ile Val Gly Asp Ala
1 5 10 15
Val Gly Trp Gly Phe Val Val Arg Gly Ser Lys Pro Cys His Ile Gln
20 25 30
Ala Val Asp Pro Ser Gly Pro Ala Ala Ala Ala Gly Met Lys Val Cys

```
        35                  40                  45
Gln Phe Val Val Ser Val Asn Gly Leu Asn Val Leu His Val Asp Tyr
    50                  55                  60
Arg Thr Val Ser Asn Leu Ile Leu Thr Gly Pro Arg Thr Ile Val Met
65                  70                  75                  80
Glu Val Met Glu Glu Leu Glu Cys
                85
```

<210> 42
<211> 97
<212> PRT
<213> Homo sapiens

<400> 42

```
Gly Gln Tyr Gly Gly Glu Thr Val Lys Ile Val Arg Ile Glu Lys Ala
 1               5                  10                  15
Arg Asp Ile Pro Leu Gly Ala Thr Val Arg Asn Glu Met Asp Ser Val
            20                  25                  30
Ile Ile Ser Arg Ile Val Lys Gly Gly Ala Ala Glu Lys Ser Gly Leu
        35                  40                  45
Leu His Glu Gly Asp Glu Val Leu Glu Ile Asn Gly Ile Glu Ile Arg
    50                  55                  60
Gly Lys Asp Val Asn Glu Val Phe Asp Leu Leu Ser Asp Met His Gly
65                  70                  75                  80
Thr Leu Thr Phe Val Leu Ile Pro Ser Gln Gln Ile Lys Pro Pro Pro
                85                  90                  95
Ala
```

<210> 43
<211> 98
<212> PRT
<213> Homo sapiens

<400> 43

```
Ile Leu Ala His Val Lys Gly Ile Glu Lys Glu Val Asn Val Tyr Lys
 1               5                  10                  15
Ser Glu Asp Ser Leu Gly Leu Thr Ile Thr Asp Asn Gly Val Gly Tyr
            20                  25                  30
Ala Phe Ile Lys Arg Ile Lys Asp Gly Gly Val Ile Asp Ser Val Lys
        35                  40                  45
Thr Ile Cys Val Gly Asp His Ile Glu Ser Ile Asn Gly Glu Asn Ile
    50                  55                  60
Val Gly Trp Arg His Tyr Asp Val Ala Lys Lys Leu Lys Glu Leu Lys
65                  70                  75                  80
Lys Glu Glu Leu Phe Thr Met Lys Leu Ile Glu Pro Lys Lys Ala Phe
                85                  90                  95
Glu Ile
```

<210> 44
<211> 104
<212> PRT
<213> Homo sapiens

<400> 44

```
Lys Pro Ser Gln Ala Ser Gly His Phe Ser Val Glu Leu Val Arg Gly
```

```
 1               5                  10                  15
Tyr Ala Gly Phe Gly Leu Thr Leu Gly Gly Gly Arg Asp Val Ala Gly
            20                  25                  30
Asp Thr Pro Leu Ala Val Arg Gly Leu Leu Lys Asp Gly Pro Ala Gln
        35                  40                  45
Arg Cys Gly Arg Leu Glu Val Gly Asp Leu Val Leu His Ile Asn Gly
    50                  55                  60
Glu Ser Thr Gln Gly Leu Thr His Ala Gln Ala Val Glu Arg Ile Arg
65                  70                  75                  80
Ala Gly Gly Pro Gln Leu His Leu Val Ile Arg Arg Pro Leu Glu Thr
                85                  90                  95
His Pro Gly Lys Pro Arg Gly Val
            100
```

<210> 45
<211> 107
<212> PRT
<213> Homo sapiens

<400> 45

```
Pro Val Met Ser Gln Cys Ala Cys Leu Glu Glu Val His Leu Pro Asn
 1               5                  10                  15
Ile Lys Pro Gly Glu Gly Leu Gly Met Tyr Ile Lys Ser Thr Tyr Asp
            20                  25                  30
Gly Leu His Val Ile Thr Gly Thr Thr Glu Asn Ser Pro Ala Asp Arg
        35                  40                  45
Ser Gln Lys Ile His Ala Gly Asp Glu Val Ile Gln Val Asn Gln Gln
    50                  55                  60
Thr Val Val Gly Trp Gln Leu Lys Asn Leu Val Lys Lys Leu Arg Glu
65                  70                  75                  80
Asn Pro Thr Gly Val Val Leu Leu Leu Lys Lys Arg Pro Thr Gly Ser
                85                  90                  95
Phe Asn Phe Thr Pro Glu Phe Ile Val Thr Asp
            100                 105
```

<210> 46
<211> 100
<212> PRT
<213> Homo sapiens

<400> 46

```
Leu Asp Asp Glu Glu Asp Ser Val Lys Ile Ile Arg Leu Val Lys Asn
 1               5                  10                  15
Arg Glu Pro Leu Gly Ala Thr Ile Lys Lys Asp Glu Gln Thr Gly Ala
            20                  25                  30
Ile Ile Val Ala Arg Ile Met Arg Gly Gly Ala Ala Asp Arg Ser Gly
        35                  40                  45
Leu Ile His Val Gly Asp Glu Leu Arg Glu Val Asn Gly Ile Pro Val
    50                  55                  60
Glu Asp Lys Arg Pro Glu Glu Ile Ile Gln Ile Leu Ala Gln Ser Gln
65                  70                  75                  80
Gly Ala Ile Thr Phe Lys Ile Ile Pro Gly Ser Lys Glu Glu Thr Pro
                85                  90                  95
Ser Asn Ser Ser
            100
```

<210> 47

<211> 83
<212> PRT
<213> Homo sapiens

<400> 47
Val Val Glu Leu Met Lys Lys Glu Gly Thr Thr Leu Gly Leu Thr Val
 1   5   10   15
Ser Gly Gly Ile Asp Lys Asp Gly Lys Pro Arg Val Ser Asn Leu Arg
            20   25   30
Gln Gly Gly Ile Ala Ala Arg Ser Asp Gln Leu Asp Val Gly Asp Tyr
        35   40   45
Ile Lys Ala Val Asn Gly Ile Asn Leu Ala Lys Phe Arg His Asp Glu
    50   55   60
Ile Ile Ser Leu Leu Lys Asn Val Gly Glu Arg Val Val Leu Glu Val
65   70   75   80
Glu Tyr Glu

<210> 48
<211> 110
<212> PRT
<213> Homo sapiens

<400> 48
Arg Ser Ser Val Ile Phe Arg Thr Val Glu Val Thr Leu His Lys Glu
 1   5   10   15
Gly Asn Thr Phe Gly Phe Val Ile Arg Gly Gly Ala His Asp Asp Arg
            20   25   30
Asn Lys Ser Arg Pro Val Val Ile Thr Cys Val Arg Pro Gly Gly Pro
        35   40   45
Ala Asp Arg Glu Gly Thr Ile Lys Pro Gly Asp Arg Leu Leu Ser Val
    50   55   60
Asp Gly Ile Arg Leu Leu Gly Thr Thr His Ala Glu Ala Met Ser Ile
65   70   75   80
Leu Lys Gln Cys Gly Gln Glu Ala Ala Leu Leu Ile Glu Tyr Asp Val
                85   90   95
Ser Val Met Asp Ser Val Ala Thr Ala Ser Gly Asn Ser Ser
            100   105   110

<210> 49
<211> 106
<212> PRT
<213> Homo sapiens

<400> 49
His Val Ala Thr Ala Ser Gly Pro Leu Leu Val Glu Val Ala Lys Thr
 1   5   10   15
Pro Gly Ala Ser Leu Gly Val Ala Leu Thr Thr Ser Met Cys Cys Asn
            20   25   30
Lys Gln Val Ile Val Ile Asp Lys Ile Lys Ser Ala Ser Ile Ala Asp
        35   40   45
Arg Cys Gly Ala Leu His Val Gly Asp His Ile Leu Ser Ile Asp Gly
    50   55   60
Thr Ser Met Glu Tyr Cys Thr Leu Ala Glu Ala Thr Gln Phe Leu Ala
65   70   75   80
Asn Thr Thr Asp Gln Val Lys Leu Glu Ile Leu Pro His His Gln Thr
                85   90   95
Arg Leu Ala Leu Lys Gly Pro Asn Ser Ser

100 105

<210> 50
<211> 97
<212> PRT
<213> Homo sapiens

<400> 50
Thr Glu Thr Thr Glu Val Val Leu Thr Ala Asp Pro Val Thr Gly Phe
1 5 10 15
Gly Ile Gln Leu Gln Gly Ser Val Phe Ala Thr Glu Thr Leu Ser Ser
20 25 30
Pro Pro Leu Ile Ser Tyr Ile Glu Ala Asp Ser Pro Ala Glu Arg Cys
35 40 45
Gly Val Leu Gln Ile Gly Asp Arg Val Met Ala Ile Asn Gly Ile Pro
50 55 60
Thr Glu Asp Ser Thr Phe Glu Glu Ala Ser Gln Leu Leu Arg Asp Ser
65 70 75 80
Ser Ile Thr Ser Lys Val Thr Leu Glu Ile Glu Phe Asp Val Ala Glu
85 90 95
Ser

<210> 51
<211> 101
<212> PRT
<213> Homo sapiens

<400> 51
Ala Glu Ser Val Ile Pro Ser Ser Gly Thr Phe His Val Lys Leu Pro
1 5 10 15
Lys Lys His Asn Val Glu Leu Gly Ile Thr Ile Ser Ser Pro Ser Ser
20 25 30
Arg Lys Pro Gly Asp Pro Leu Val Ile Ser Asp Ile Lys Lys Gly Ser
35 40 45
Val Ala His Arg Thr Gly Thr Leu Glu Leu Gly Asp Lys Leu Leu Ala
50 55 60
Ile Asp Asn Ile Arg Leu Asp Asn Cys Ser Met Glu Asp Ala Val Gln
65 70 75 80
Ile Leu Gln Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp
85 90 95
Glu Asp Asn Ser Asp
100

<210> 52
<211> 90
<212> PRT
<213> Homo sapiens

<400> 52
Ile Tyr Thr Val Glu Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr
1 5 10 15
Ile Ser Gly Thr Glu Glu Pro Phe Asp Pro Ile Ile Ile Ser Ser Leu
20 25 30
Thr Lys Gly Gly Leu Ala Glu Arg Thr Gly Ala Ile His Ile Gly Asp
35 40 45
Arg Ile Leu Ala Ile Asn Ser Ser Ser Leu Lys Gly Lys Pro Leu Ser

```
    50                  55                  60
Glu Ala Ile His Leu Leu Gln Met Ala Gly Glu Thr Val Thr Leu Lys
65                  70                  75                  80
Ile Lys Lys Gln Thr Asp Ala Gln Ser Ala
                85                  90
```

<210> 53
<211> 95
<212> PRT
<213> Homo sapiens

<400> 53

```
Ile Met Ser Pro Thr Pro Val Glu Leu His Lys Val Thr Leu Tyr Lys
 1               5                  10                  15
Asp Ser Asp Met Glu Asp Phe Gly Phe Ser Val Ala Asp Gly Leu Leu
            20                  25                  30
Glu Lys Gly Val Tyr Val Lys Asn Ile Arg Pro Ala Gly Pro Gly Asp
        35                  40                  45
Leu Gly Gly Leu Lys Pro Tyr Asp Arg Leu Leu Gln Val Asn His Val
    50                  55                  60
Arg Thr Arg Asp Phe Asp Cys Cys Leu Val Val Pro Leu Ile Ala Glu
65                  70                  75                  80
Ser Gly Asn Lys Leu Asp Leu Val Ile Ser Arg Asn Pro Leu Ala
                85                  90                  95
```

<210> 54
<211> 88
<212> PRT
<213> Homo sapiens

<400> 54

```
Ser Arg Gly Cys Glu Thr Arg Glu Leu Ala Leu Pro Arg Asp Gly Gln
 1               5                  10                  15
Gly Arg Leu Gly Phe Glu Val Asp Ala Glu Gly Phe Val Thr His Val
            20                  25                  30
Glu Arg Phe Thr Phe Ala Glu Thr Ala Gly Leu Arg Pro Gly Ala Arg
        35                  40                  45
Leu Leu Arg Val Cys Gly Gln Thr Leu Pro Ser Leu Arg Pro Glu Ala
    50                  55                  60
Ala Ala Gln Leu Leu Arg Ser Ala Pro Lys Val Cys Val Thr Val Leu
65                  70                  75                  80
Pro Pro Asp Glu Ser Gly Arg Pro
                85
```

<210> 55
<211> 95
<212> PRT
<213> Homo sapiens

<400> 55

```
Ala Lys Ala Lys Trp Arg Gln Val Val Leu Gln Lys Ala Ser Arg Glu
 1               5                  10                  15
Ser Pro Leu Gln Phe Ser Leu Asn Gly Gly Ser Glu Lys Gly Phe Gly
            20                  25                  30
Ile Phe Val Glu Gly Val Glu Pro Gly Ser Lys Ala Ala Asp Ser Gly
        35                  40                  45
Leu Lys Arg Gly Asp Gln Ile Met Glu Val Asn Gly Gln Asn Phe Glu
```

50 55 60
Asn Ile Thr Phe Met Lys Ala Val Glu Ile Leu Arg Asn Asn Thr His
65 70 75 80
Leu Ala Leu Thr Val Lys Thr Asn Ile Phe Val Phe Lys Glu Leu
85 90 95

<210> 56
<211> 89
<212> PRT
<213> Homo sapiens

<400> 56
Leu Glu Asn Val Ile Ala Lys Ser Leu Leu Ile Lys Ser Asn Glu Gly
1 5 10 15
Ser Tyr Gly Phe Gly Leu Glu Asp Lys Asn Lys Val Pro Ile Ile Lys
20 25 30
Leu Val Glu Lys Gly Ser Asn Ala Glu Met Ala Gly Met Glu Val Gly
35 40 45
Lys Lys Ile Phe Ala Ile Asn Gly Asp Leu Val Phe Met Arg Pro Phe
50 55 60
Asn Glu Val Asp Cys Phe Leu Lys Ser Cys Leu Asn Ser Arg Lys Pro
65 70 75 80
Leu Arg Val Leu Val Ser Thr Lys Pro
85

<210> 57
<211> 82
<212> PRT
<213> Homo sapiens

<400> 57
Pro Arg Glu Thr Val Lys Ile Pro Asp Ser Ala Asp Gly Leu Gly Phe
1 5 10 15
Gln Ile Arg Gly Phe Gly Pro Ser Val Val His Ala Val Gly Arg Gly
20 25 30
Thr Val Ala Ala Ala Ala Gly Leu His Pro Gly Gln Cys Ile Ile Lys
35 40 45
Val Asn Gly Ile Asn Val Ser Lys Glu Thr His Ala Ser Val Ile Ala
50 55 60
His Val Thr Ala Cys Arg Lys Tyr Arg Arg Pro Thr Lys Gln Asp Ser
65 70 75 80
Ile Gln

<210> 58
<211> 100
<212> PRT
<213> Homo sapiens

<400> 58
Glu Asp Phe Cys Tyr Val Phe Thr Val Glu Leu Glu Arg Gly Pro Ser
1 5 10 15
Gly Leu Gly Met Gly Leu Ile Asp Gly Met His Thr His Leu Gly Ala
20 25 30
Pro Gly Leu Tyr Ile Gln Thr Leu Leu Pro Gly Ser Pro Ala Ala Ala
35 40 45
Asp Gly Arg Leu Ser Leu Gly Asp Arg Ile Leu Glu Val Asn Gly Ser

```
    50                  55                  60
Ser Leu Leu Gly Leu Gly Tyr Leu Arg Ala Val Asp Leu Ile Arg His
65                  70                  75                  80
Gly Gly Lys Lys Met Arg Phe Leu Val Ala Lys Ser Asp Val Glu Thr
                85                  90                  95
Ala Lys Lys Ile
            100
```

<210> 59
<211> 109
<212> PRT
<213> Homo sapiens

<400> 59

```
Leu Thr Glu Phe Gln Asp Lys Gln Ile Lys Asp Trp Lys Lys Arg Phe
 1               5                  10                  15
Ile Gly Ile Arg Met Arg Thr Ile Thr Pro Ser Leu Val Asp Glu Leu
            20                  25                  30
Lys Ala Ser Asn Pro Asp Phe Pro Glu Val Ser Ser Gly Ile Tyr Val
        35                  40                  45
Gln Glu Val Ala Pro Asn Ser Pro Ser Gln Arg Gly Gly Ile Gln Asp
    50                  55                  60
Gly Asp Ile Ile Val Lys Val Asn Gly Arg Pro Leu Val Asp Ser Ser
65                  70                  75                  80
Glu Leu Gln Glu Ala Val Leu Thr Glu Ser Pro Leu Leu Leu Glu Val
                85                  90                  95
Arg Arg Gly Asn Asp Asp Leu Leu Phe Ser Asn Ser Ser
            100                 105
```

<210> 60
<211> 97
<212> PRT
<213> Homo sapiens

<400> 60

```
His Lys Lys Tyr Leu Gly Leu Gln Met Leu Ser Leu Thr Val Pro Leu
 1               5                  10                  15
Ser Glu Glu Leu Lys Met His Tyr Pro Asp Phe Pro Asp Val Ser Ser
            20                  25                  30
Gly Val Tyr Val Cys Lys Val Val Glu Gly Thr Ala Ala Gln Ser Ser
        35                  40                  45
Gly Leu Arg Asp His Asp Val Ile Val Asn Ile Asn Gly Lys Pro Ile
    50                  55                  60
Thr Thr Thr Thr Asp Val Val Lys Ala Leu Asp Ser Asp Ser Leu Ser
65                  70                  75                  80
Met Ala Val Leu Arg Gly Lys Asp Asn Leu Leu Leu Thr Val Asn Ser
                85                  90                  95
Ser
```

<210> 61
<211> 104
<212> PRT
<213> Homo sapiens

<400> 61

```
Ile Trp Gln Ile Glu Tyr Ile Asp Ile Glu Arg Pro Ser Thr Gly Gly
```

```
 1               5                  10                  15
Leu Gly Phe Ser Val Val Ala Leu Arg Ser Gln Asn Leu Gly Lys Val
            20                  25                  30
Asp Ile Phe Val Lys Asp Val Gln Pro Gly Ser Val Ala Asp Arg Asp
        35                  40                  45
Gln Arg Leu Lys Glu Asn Asp Gln Ile Leu Ala Ile Asn His Thr Pro
    50                  55                  60
Leu Asp Gln Asn Ile Ser His Gln Gln Ala Ile Ala Leu Leu Gln Gln
65                  70                  75                  80
Thr Thr Gly Ser Leu Arg Leu Ile Val Ala Arg Glu Pro Val His Thr
                85                  90                  95
Lys Ser Ser Thr Ser Ser Ser Glu
            100
```

<210> 62
<211> 78
<212> PRT
<213> Homo sapiens

<400> 62

```
Pro Gly His Val Glu Glu Val Glu Leu Ile Asn Asp Gly Ser Gly Leu
 1               5                  10                  15
Gly Phe Gly Ile Val Gly Gly Lys Thr Ser Gly Val Val Val Arg Thr
            20                  25                  30
Ile Val Pro Gly Gly Leu Ala Asp Arg Asp Gly Arg Leu Gln Thr Gly
        35                  40                  45
Asp His Ile Leu Lys Ile Gly Gly Thr Asn Val Gln Gly Met Thr Ser
    50                  55                  60
Glu Gln Val Ala Gln Val Leu Arg Asn Cys Gly Asn Ser Ser
65                  70                  75
```

<210> 63
<211> 111
<212> PRT
<213> Homo sapiens

<400> 63

```
Pro Gly Ser Asp Ser Ser Leu Phe Glu Thr Tyr Asn Val Glu Leu Val
 1               5                  10                  15
Arg Lys Asp Gly Gln Ser Leu Gly Ile Arg Ile Val Gly Tyr Val Gly
            20                  25                  30
Thr Ser His Thr Gly Glu Ala Ser Gly Ile Tyr Val Lys Ser Ile Ile
        35                  40                  45
Pro Gly Ser Ala Ala Tyr His Asn Gly His Ile Gln Val Asn Asp Lys
    50                  55                  60
Ile Val Ala Val Asp Gly Val Asn Ile Gln Gly Phe Ala Asn His Asp
65                  70                  75                  80
Val Val Glu Val Leu Arg Asn Ala Gly Gln Val Val His Leu Thr Leu
                85                  90                  95
Val Arg Arg Lys Thr Ser Ser Ser Thr Ser Arg Ile His Arg Asp
            100                 105                 110
```

<210> 64
<211> 96
<212> PRT
<213> Homo sapiens

<400> 64
Asn Ser Asp Asp Ala Glu Leu Gln Lys Tyr Ser Lys Leu Leu Pro Ile
 1   5   10   15
His Thr Leu Arg Leu Gly Val Glu Val Asp Ser Phe Asp Gly His His
            20   25   30
Tyr Ile Ser Ser Ile Val Ser Gly Gly Pro Val Asp Thr Leu Gly Leu
        35   40   45
Leu Gln Pro Glu Asp Glu Leu Leu Glu Val Asn Gly Met Gln Leu Tyr
    50   55   60
Gly Lys Ser Arg Arg Glu Ala Val Ser Phe Leu Lys Glu Val Pro Pro
65   70   75   80
Pro Phe Thr Leu Val Cys Cys Arg Arg Leu Phe Asp Asp Glu Ala Ser
                85   90   95

<210> 65
<211> 102
<212> PRT
<213> Homo sapiens

<400> 65
Leu Ser Ser Pro Glu Val Lys Ile Val Glu Leu Val Lys Asp Cys Lys
 1   5   10   15
Gly Leu Gly Phe Ser Ile Leu Asp Tyr Gln Asp Pro Leu Asp Pro Thr
            20   25   30
Arg Ser Val Ile Val Ile Arg Ser Leu Val Ala Asp Gly Val Ala Glu
        35   40   45
Arg Ser Gly Gly Leu Leu Pro Gly Asp Arg Leu Val Ser Val Asn Glu
    50   55   60
Tyr Cys Leu Asp Asn Thr Ser Leu Ala Glu Ala Val Glu Ile Leu Lys
65   70   75   80
Ala Val Pro Pro Gly Leu Val His Leu Gly Ile Cys Lys Pro Leu Val
                85   90   95
Glu Phe Ile Val Thr Asp
            100

<210> 66
<211> 119
<212> PRT
<213> Homo sapiens

<400> 66
Pro Asn Phe Ser His Trp Gly Pro Pro Arg Ile Val Glu Ile Phe Arg
 1   5   10   15
Glu Pro Asn Val Ser Leu Gly Ile Ser Ile Val Val Gly Gln Thr Val
            20   25   30
Ile Lys Arg Leu Lys Asn Gly Glu Glu Leu Lys Gly Ile Phe Ile Lys
        35   40   45
Gln Val Leu Glu Asp Ser Pro Ala Gly Lys Thr Asn Ala Leu Lys Thr
    50   55   60
Gly Asp Lys Ile Leu Glu Val Ser Gly Val Asp Leu Gln Asn Ala Ser
65   70   75   80
His Ser Glu Ala Val Glu Ala Ile Lys Asn Ala Gly Asn Pro Val Val
                85   90   95
Phe Ile Val Gln Ser Leu Ser Ser Thr Pro Arg Val Ile Pro Asn Val
            100   105   110
His Asn Lys Ala Asn Ser Ser
        115

<210> 67
<211> 99
<212> PRT
<213> Homo sapiens

<400> 67
Pro Gly Glu Leu His Ile Ile Glu Leu Glu Lys Asp Lys Asn Gly Leu
 1   5   10   15
Gly Leu Ser Leu Ala Gly Asn Lys Asp Arg Ser Arg Met Ser Ile Phe
            20   25   30
Val Val Gly Ile Asn Pro Glu Gly Pro Ala Ala Ala Asp Gly Arg Met
        35   40   45
Arg Ile Gly Asp Glu Leu Leu Glu Ile Asn Asn Gln Ile Leu Tyr Gly
    50   55   60
Arg Ser His Gln Asn Ala Ser Ala Ile Ile Lys Thr Ala Pro Ser Lys
65   70   75   80
Val Lys Leu Val Phe Ile Arg Asn Glu Asp Ala Val Asn Gln Met Ala
                85   90   95
Asn Ser Ser

<210> 68
<211> 93
<212> PRT
<213> Homo sapiens

<400> 68
Pro Ala Thr Cys Pro Ile Val Pro Gly Gln Glu Met Ile Ile Glu Ile
 1   5   10   15
Ser Lys Gly Arg Ser Gly Leu Gly Leu Ser Ile Val Gly Gly Lys Asp
            20   25   30
Thr Pro Leu Asn Ala Ile Val Ile His Glu Val Tyr Glu Glu Gly Ala
        35   40   45
Ala Ala Arg Asp Gly Arg Leu Trp Ala Gly Asp Gln Ile Leu Glu Val
    50   55   60
Asn Gly Val Asp Leu Arg Asn Ser Ser His Glu Glu Ala Ile Thr Ala
65   70   75   80
Leu Arg Gln Thr Pro Gln Lys Val Arg Leu Val Val Tyr
                85   90

<210> 69
<211> 103
<212> PRT
<213> Homo sapiens

<400> 69
Ile Leu Thr Leu Thr Ile Leu Arg Gln Thr Gly Gly Leu Gly Ile Ser
 1   5   10   15
Ile Ala Gly Gly Lys Gly Ser Thr Pro Tyr Lys Gly Asp Asp Glu Gly
            20   25   30
Ile Phe Ile Ser Arg Val Ser Glu Glu Gly Pro Ala Ala Arg Ala Gly
        35   40   45
Val Arg Val Gly Asp Lys Leu Leu Glu Val Asn Gly Val Ala Leu Gln
    50   55   60
Gly Ala Glu His His Glu Ala Val Glu Ala Leu Arg Gly Ala Gly Thr
65   70   75   80
Ala Val Gln Met Arg Val Trp Arg Glu Arg Met Val Glu Pro Glu Asn

85 90 95
Ala Glu Phe Ile Val Thr Asp
100

<210> 70
<211> 97
<212> PRT
<213> Homo sapiens

<400> 70
Pro Leu Arg Gln Arg His Val Ala Cys Leu Ala Arg Ser Glu Arg Gly
1 5 10 15
Leu Gly Phe Ser Ile Ala Gly Gly Lys Gly Ser Thr Pro Tyr Arg Ala
20 25 30
Gly Asp Ala Gly Ile Phe Val Ser Arg Ile Ala Glu Gly Gly Ala Ala
35 40 45
His Arg Ala Gly Thr Leu Gln Val Gly Asp Arg Val Leu Ser Ile Asn
50 55 60
Gly Val Asp Val Thr Glu Ala Arg His Asp His Ala Val Ser Leu Leu
65 70 75 80
Thr Ala Ala Ser Pro Thr Ile Ala Leu Leu Leu Glu Arg Glu Ala Gly
85 90 95
Gly

<210> 71
<211> 106
<212> PRT
<213> Homo sapiens

<400> 71
Ile Leu Glu Gly Pro Tyr Pro Val Glu Glu Ile Arg Leu Pro Arg Ala
1 5 10 15
Gly Gly Pro Leu Gly Leu Ser Ile Val Gly Gly Ser Asp His Ser Ser
20 25 30
His Pro Phe Gly Val Gln Glu Pro Gly Val Phe Ile Ser Lys Val Leu
35 40 45
Pro Arg Gly Leu Ala Ala Arg Ser Gly Leu Arg Val Gly Asp Arg Ile
50 55 60
Leu Ala Val Asn Gly Gln Asp Val Arg Asp Ala Thr His Gln Glu Ala
65 70 75 80
Val Ser Ala Leu Leu Arg Pro Cys Leu Glu Leu Ser Leu Leu Val Arg
85 90 95
Arg Asp Pro Ala Glu Phe Ile Val Thr Asp
100 105

<210> 72
<211> 105
<212> PRT
<213> Homo sapiens

<400> 72
Arg Glu Leu Cys Ile Gln Lys Ala Pro Gly Glu Arg Leu Gly Ile Ser
1 5 10 15
Ile Arg Gly Gly Ala Arg Gly His Ala Gly Asn Pro Arg Asp Pro Thr
20 25 30
Asp Glu Gly Ile Phe Ile Ser Lys Val Ser Pro Thr Gly Ala Ala Gly

```
        35                  40                  45
Arg Asp Gly Arg Leu Arg Val Gly Leu Arg Leu Leu Glu Val Asn Gln
    50                  55                  60
Gln Ser Leu Leu Gly Leu Thr His Gly Glu Ala Val Gln Leu Leu Arg
65                  70                  75                  80
Ser Val Gly Asp Thr Leu Thr Val Leu Val Cys Asp Gly Phe Glu Ala
                85                  90                  95
Ser Thr Asp Ala Ala Leu Glu Val Ser
            100                 105
```

<210> 73
<211> 91
<212> PRT
<213> Homo sapiens

<400> 73

```
Pro His Gln Pro Ile Val Ile His Ser Ser Gly Lys Asn Tyr Gly Phe
 1               5                  10                  15
Thr Ile Arg Ala Ile Arg Val Tyr Val Gly Asp Ser Asp Ile Tyr Thr
            20                  25                  30
Val His His Ile Val Trp Asn Val Glu Glu Gly Ser Pro Ala Cys Gln
        35                  40                  45
Ala Gly Leu Lys Ala Gly Asp Leu Ile Thr His Ile Asn Gly Glu Pro
    50                  55                  60
Val His Gly Leu Val His Thr Glu Val Ile Glu Leu Leu Leu Lys Ser
65                  70                  75                  80
Gly Asn Lys Val Ser Ile Thr Thr Thr Pro Phe
                85                  90
```

<210> 74
<211> 105
<212> PRT
<213> Homo sapiens

<400> 74

```
Ile Leu Ala Cys Ala Ala Lys Ala Lys Arg Arg Leu Met Thr Leu Thr
 1               5                  10                  15
Lys Pro Ser Arg Glu Ala Pro Leu Pro Phe Ile Leu Leu Gly Gly Ser
            20                  25                  30
Glu Lys Gly Phe Gly Ile Phe Val Asp Ser Val Asp Ser Gly Ser Lys
        35                  40                  45
Ala Thr Glu Ala Gly Leu Lys Arg Gly Asp Gln Ile Leu Glu Val Asn
    50                  55                  60
Gly Gln Asn Phe Glu Asn Ile Gln Leu Ser Lys Ala Met Glu Ile Leu
65                  70                  75                  80
Arg Asn Asn Thr His Leu Ser Ile Thr Val Lys Thr Asn Leu Phe Val
                85                  90                  95
Phe Lys Glu Leu Leu Thr Asn Ser Ser
            100                 105
```

<210> 75
<211> 88
<212> PRT
<213> Homo sapiens

<400> 75

```
Ile Pro Pro Ala Pro Arg Lys Val Glu Met Arg Arg Asp Pro Val Leu
```

```
 1               5                  10                  15
Gly Phe Gly Phe Val Ala Gly Ser Glu Lys Pro Val Val Val Arg Ser
            20                  25                  30
Val Thr Pro Gly Gly Pro Ser Glu Gly Lys Leu Ile Pro Gly Asp Gln
        35                  40                  45
Ile Val Met Ile Asn Asp Glu Pro Val Ser Ala Ala Pro Arg Glu Arg
    50                  55                  60
Val Ile Asp Leu Val Arg Ser Cys Lys Glu Ser Ile Leu Leu Thr Val
65                  70                  75                  80
Ile Gln Pro Tyr Pro Ser Pro Lys
                85
```

<210> 76
<211> 101
<212> PRT
<213> Homo sapiens

<400> 76

```
Leu Asn Lys Arg Thr Thr Met Pro Lys Asp Ser Gly Ala Leu Leu Gly
 1               5                  10                  15
Leu Lys Val Val Gly Gly Lys Met Thr Asp Leu Gly Arg Leu Gly Ala
            20                  25                  30
Phe Ile Thr Lys Val Lys Lys Gly Ser Leu Ala Asp Val Val Gly His
        35                  40                  45
Leu Arg Ala Gly Asp Glu Val Leu Glu Trp Asn Gly Lys Pro Leu Pro
    50                  55                  60
Gly Ala Thr Asn Glu Glu Val Tyr Asn Ile Ile Leu Glu Ser Lys Ser
65                  70                  75                  80
Glu Pro Gln Val Glu Ile Ile Val Ser Arg Pro Ile Gly Asp Ile Pro
                85                  90                  95
Arg Ile His Arg Asp
            100
```

<210> 77
<211> 79
<212> PRT
<213> Homo sapiens

<400> 77

```
Gln Arg Cys Val Ile Ile Gln Lys Asp Gln His Gly Phe Gly Phe Thr
 1               5                  10                  15
Val Ser Gly Asp Arg Ile Val Leu Val Gln Ser Val Arg Pro Gly Gly
            20                  25                  30
Ala Ala Met Lys Ala Gly Val Lys Glu Gly Asp Arg Ile Ile Lys Val
        35                  40                  45
Asn Gly Thr Met Val Thr Asn Ser Ser His Leu Glu Val Val Lys Leu
    50                  55                  60
Ile Lys Ser Gly Ala Tyr Val Ala Leu Thr Leu Leu Gly Ser Ser
65                  70                  75
```

<210> 78
<211> 87
<212> PRT
<213> Homo sapiens

<400> 78

```
Ile Leu Val Gln Arg Cys Val Ile Ile Gln Lys Asp Asp Asn Gly Phe
```

```
 1               5                  10                  15
Gly Leu Thr Val Ser Gly Asp Asn Pro Val Phe Val Gln Ser Val Lys
            20                  25                  30
Glu Asp Gly Ala Ala Met Arg Ala Gly Val Gln Thr Gly Asp Arg Ile
        35                  40                  45
Ile Lys Val Asn Gly Thr Leu Val Thr His Ser Asn His Leu Glu Val
    50                  55                  60
Val Lys Leu Ile Lys Ser Gly Ser Tyr Val Ala Leu Thr Val Gln Gly
65                  70                  75                  80
Arg Pro Pro Gly Asn Ser Ser
                85
```

<210> 79
<211> 79
<212> PRT
<213> Homo sapiens

<400> 79

```
Ser Val Glu Met Thr Leu Arg Arg Asn Gly Leu Gly Gln Leu Gly Phe
 1               5                  10                  15
His Val Asn Tyr Glu Gly Ile Val Ala Asp Val Glu Pro Tyr Gly Tyr
            20                  25                  30
Ala Trp Gln Ala Gly Leu Arg Gln Gly Ser Arg Leu Val Glu Ile Cys
        35                  40                  45
Lys Val Ala Val Ala Thr Leu Ser His Glu Gln Met Ile Asp Leu Leu
    50                  55                  60
Arg Thr Ser Val Thr Val Lys Val Val Ile Ile Pro Pro His Asp
65                  70                  75
```

<210> 80
<211> 96
<212> PRT
<213> Homo sapiens

<400> 80

```
Leu Lys Val Met Thr Ser Gly Trp Glu Thr Val Asp Met Thr Leu Arg
 1               5                  10                  15
Arg Asn Gly Leu Gly Gln Leu Gly Phe His Val Lys Tyr Asp Gly Thr
            20                  25                  30
Val Ala Glu Val Glu Asp Tyr Gly Phe Ala Trp Gln Ala Gly Leu Arg
        35                  40                  45
Gln Gly Ser Arg Leu Val Glu Ile Cys Lys Val Ala Val Val Thr Leu
    50                  55                  60
Thr His Asp Gln Met Ile Asp Leu Leu Arg Thr Ser Val Thr Val Lys
65                  70                  75                  80
Val Val Ile Ile Pro Pro Phe Glu Asp Gly Thr Pro Arg Arg Gly Trp
                85                  90                  95
```

<210> 81
<211> 105
<212> PRT
<213> Homo sapiens

<400> 81

```
His Tyr Ile Phe Pro His Ala Arg Ile Lys Ile Thr Arg Asp Ser Lys
 1               5                  10                  15
Asp His Thr Val Ser Gly Asn Gly Leu Gly Ile Arg Ile Val Gly Gly
```

```
            20                  25                  30
Lys Glu Ile Pro Gly His Ser Gly Glu Ile Gly Ala Tyr Ile Ala Lys
        35                  40                  45
Ile Leu Pro Gly Gly Ser Ala Glu Gln Thr Gly Lys Leu Met Glu Gly
    50                  55                  60
Met Gln Val Leu Glu Trp Asn Gly Ile Pro Leu Thr Ser Lys Thr Tyr
65                  70                  75                  80
Glu Glu Val Gln Ser Ile Ile Ser Gln Gln Ser Gly Glu Ala Glu Ile
                85                  90                  95
Cys Val Arg Leu Asp Leu Asn Met Leu
            100                 105


<210> 82
<211> 103
<212> PRT
<213> Homo sapiens

<400> 82
Leu Cys Gly Ser Leu Arg Pro Pro Ile Val Ile His Ser Ser Gly Lys
 1               5                  10                  15
Lys Tyr Gly Phe Ser Leu Arg Ala Ile Arg Val Tyr Met Gly Asp Ser
            20                  25                  30
Asp Val Tyr Thr Val His His Val Val Trp Ser Val Glu Asp Gly Ser
        35                  40                  45
Pro Ala Gln Glu Ala Gly Leu Arg Ala Gly Asp Leu Ile Thr His Ile
    50                  55                  60
Asn Gly Glu Ser Val Leu Gly Leu Val His Met Asp Val Val Glu Leu
65                  70                  75                  80
Leu Leu Lys Ser Gly Asn Lys Ile Ser Leu Arg Thr Thr Ala Leu Glu
                85                  90                  95
Asn Thr Ser Ile Lys Val Gly
            100


<210> 83
<211> 86
<212> PRT
<213> Homo sapiens

<400> 83
Ser Tyr Ser Val Thr Leu Thr Gly Pro Gly Pro Trp Gly Phe Arg Leu
 1               5                  10                  15
Gln Gly Gly Lys Asp Phe Asn Met Pro Leu Thr Ile Ser Arg Ile Thr
            20                  25                  30
Pro Gly Ser Lys Ala Ala Gln Ser Gln Leu Ser Gln Gly Asp Leu Val
        35                  40                  45
Val Ala Ile Asp Gly Val Asn Thr Asp Thr Met Thr His Leu Glu Ala
    50                  55                  60
Gln Asn Lys Ile Lys Ser Ala Ser Tyr Asn Leu Ser Leu Thr Leu Gln
65                  70                  75                  80
Lys Ser Lys Asn Ser Ser
                85


<210> 84
<211> 91
<212> PRT
<213> Homo sapiens
```

<400> 84
Ile Ser Arg Asp Ser Gly Ala Met Leu Gly Leu Lys Val Val Gly Gly
 1   5   10   15
Lys Met Thr Glu Ser Gly Arg Leu Cys Ala Phe Ile Thr Lys Val Lys
            20   25   30
Lys Gly Ser Leu Ala Asp Thr Val Gly His Leu Arg Pro Gly Asp Glu
        35   40   45
Val Leu Glu Trp Asn Gly Arg Leu Leu Gln Gly Ala Thr Phe Glu Glu
    50   55   60
Val Tyr Asn Ile Ile Leu Glu Ser Lys Pro Glu Pro Gln Val Glu Leu
65   70   75   80
Val Val Ser Arg Pro Ile Ala Ile His Arg Asp
                85   90

<210> 85
<211> 101
<212> PRT
<213> Homo sapiens

<400> 85
Ile Ser Ala Leu Gly Ser Met Arg Pro Pro Ile Ile Ile His Arg Ala
 1   5   10   15
Gly Lys Lys Tyr Gly Phe Thr Leu Arg Ala Ile Arg Val Tyr Met Gly
            20   25   30
Asp Ser Asp Val Tyr Thr Val His His Met Val Trp His Val Glu Asp
        35   40   45
Gly Gly Pro Ala Ser Glu Ala Gly Leu Arg Gln Gly Asp Leu Ile Thr
    50   55   60
His Val Asn Gly Glu Pro Val His Gly Leu Val His Thr Glu Val Val
65   70   75   80
Glu Leu Ile Leu Lys Ser Gly Asn Lys Val Ala Ile Ser Thr Thr Pro
                85   90   95
Leu Glu Asn Ser Ser
            100

<210> 86
<211> 94
<212> PRT
<213> Homo sapiens

<400> 86
Phe Ser Asp Met Arg Ile Ser Ile Asn Gln Thr Pro Gly Lys Ser Leu
 1   5   10   15
Asp Phe Gly Phe Thr Ile Lys Trp Asp Ile Pro Gly Ile Phe Val Ala
            20   25   30
Ser Val Glu Ala Gly Ser Pro Ala Glu Phe Ser Gln Leu Gln Val Asp
        35   40   45
Asp Glu Ile Ile Ala Ile Asn Asn Thr Lys Phe Ser Tyr Asn Asp Ser
    50   55   60
Lys Glu Trp Glu Glu Ala Met Ala Lys Ala Gln Glu Thr Gly His Leu
65   70   75   80
Val Met Asp Val Arg Arg Tyr Gly Lys Ala Gly Ser Pro Glu
                85   90

<210> 87
<211> 98
<212> PRT

<213> Homo sapiens

<400> 87
Gln Ser Ala His Leu Glu Val Ile Gln Leu Ala Asn Ile Lys Pro Ser
 1   5   10   15
Glu Gly Leu Gly Met Tyr Ile Lys Ser Thr Tyr Asp Gly Leu His Val
            20   25   30
Ile Thr Gly Thr Thr Glu Asn Ser Pro Ala Asp Arg Cys Lys Lys Ile
        35   40   45
His Ala Gly Asp Glu Val Ile Gln Val Asn His Gln Thr Val Val Gly
    50   55   60
Trp Gln Leu Lys Asn Leu Val Asn Ala Leu Arg Glu Asp Pro Ser Gly
65   70   75   80
Val Ile Leu Thr Leu Lys Lys Arg Pro Gln Ser Met Leu Thr Ser Ala
                85   90   95
Pro Ala

<210> 88
<211> 100
<212> PRT
<213> Homo sapiens

<400> 88
Ile Leu Thr Gln Thr Leu Ile Pro Val Arg His Thr Val Lys Ile Asp
 1   5   10   15
Lys Asp Thr Leu Leu Gln Asp Tyr Gly Phe His Ile Ser Glu Ser Leu
            20   25   30
Pro Leu Thr Val Val Ala Val Thr Ala Gly Gly Ser Ala His Gly Lys
        35   40   45
Leu Phe Pro Gly Asp Gln Ile Leu Gln Met Asn Asn Glu Pro Ala Glu
    50   55   60
Asp Leu Ser Trp Glu Arg Ala Val Asp Ile Leu Arg Glu Ala Glu Asp
65   70   75   80
Ser Leu Ser Ile Thr Val Val Arg Cys Thr Ser Gly Val Pro Lys Ser
                85   90   95
Ser Asn Ser Ser
            100

<210> 89
<211> 93
<212> PRT
<213> Homo sapiens

<400> 89
Gly Leu Arg Ser Pro Ile Thr Ile Gln Arg Ser Gly Lys Lys Tyr Gly
 1   5   10   15
Phe Thr Leu Arg Ala Ile Arg Val Tyr Met Gly Asp Thr Asp Val Tyr
            20   25   30
Ser Val His His Ile Val Trp His Val Glu Glu Gly Gly Pro Ala Gln
        35   40   45
Glu Ala Gly Leu Cys Ala Gly Asp Leu Ile Thr His Val Asn Gly Glu
    50   55   60
Pro Val His Gly Met Val His Pro Glu Val Val Glu Leu Ile Leu Lys
65   70   75   80
Ser Gly Asn Lys Val Ala Val Thr Thr Thr Pro Phe Glu
                85   90

<210> 90
<211> 107
<212> PRT
<213> Homo sapiens

<400> 90
Gln Gly Glu Glu Thr Lys Ser Leu Thr Leu Val Leu His Arg Asp Ser
 1   5   10   15
Gly Ser Leu Gly Phe Asn Ile Ile Gly Gly Arg Pro Ser Val Asp Asn
            20   25   30
His Asp Gly Ser Ser Ser Glu Gly Ile Phe Val Ser Lys Ile Val Asp
        35   40   45
Ser Gly Pro Ala Ala Lys Glu Gly Gly Leu Gln Ile His Asp Arg Ile
    50   55   60
Ile Glu Val Asn Gly Arg Asp Leu Ser Arg Ala Thr His Asp Gln Ala
65   70   75   80
Val Glu Ala Phe Lys Thr Ala Lys Glu Pro Ile Val Val Gln Val Leu
                85   90   95
Arg Arg Thr Pro Arg Thr Lys Met Phe Thr Pro
            100   105

<210> 91
<211> 101
<212> PRT
<213> Homo sapiens

<400> 91
Gln Glu Met Asp Arg Glu Glu Leu Glu Leu Glu Glu Val Asp Leu Tyr
 1   5   10   15
Arg Met Asn Ser Gln Asp Lys Leu Gly Leu Thr Val Cys Tyr Arg Thr
            20   25   30
Asp Asp Glu Asp Asp Ile Gly Ile Tyr Ile Ser Glu Ile Asp Pro Asn
        35   40   45
Ser Ile Ala Ala Lys Asp Gly Arg Ile Arg Glu Gly Asp Arg Ile Ile
    50   55   60
Gln Ile Asn Gly Ile Glu Val Gln Asn Arg Glu Glu Ala Val Ala Leu
65   70   75   80
Leu Thr Ser Glu Glu Asn Lys Asn Phe Ser Leu Leu Ile Ala Arg Pro
                85   90   95
Glu Leu Gln Leu Asp
            100

<210> 92
<211> 91
<212> PRT
<213> Homo sapiens

<400> 92
Arg Ser Phe Gln Tyr Val Pro Val Gln Leu Gln Gly Gly Ala Pro Trp
 1   5   10   15
Gly Phe Thr Leu Lys Gly Gly Leu Glu His Cys Glu Pro Leu Thr Val
            20   25   30
Ser Lys Ile Glu Asp Gly Gly Lys Ala Ala Leu Ser Gln Lys Met Arg
        35   40   45
Thr Gly Asp Glu Leu Val Asn Ile Asn Gly Thr Pro Leu Tyr Gly Ser
    50   55   60
Arg Gln Glu Ala Leu Ile Leu Ile Lys Gly Ser Phe Arg Ile Leu Lys

65 70 75 80
Leu Ile Val Arg Arg Arg Asn Ala Pro Val Ser
85 90

<210> 93
<211> 102
<212> PRT
<213> Homo sapiens

<400> 93
Ile Leu Glu Lys Leu Glu Leu Phe Pro Val Glu Leu Glu Lys Asp Glu
1 5 10 15
Asp Gly Leu Gly Ile Ser Ile Ile Gly Met Gly Val Gly Ala Asp Ala
20 25 30
Gly Leu Glu Lys Leu Gly Ile Phe Val Lys Thr Val Thr Glu Gly Gly
35 40 45
Ala Ala Gln Arg Asp Gly Arg Ile Gln Val Asn Asp Gln Ile Val Glu
50 55 60
Val Asp Gly Ile Ser Leu Val Gly Val Thr Gln Asn Phe Ala Ala Thr
65 70 75 80
Val Leu Arg Asn Thr Lys Gly Asn Val Arg Phe Val Ile Gly Arg Glu
85 90 95
Lys Pro Gly Gln Val Ser
100

<210> 94
<211> 113
<212> PRT
<213> Homo sapiens

<400> 94
Lys Asp Val Asn Val Tyr Val Asn Pro Lys Lys Leu Thr Val Ile Lys
1 5 10 15
Ala Lys Glu Gln Leu Lys Leu Leu Glu Val Leu Val Gly Ile Ile His
20 25 30
Gln Thr Lys Trp Ser Trp Arg Arg Thr Gly Lys Gln Gly Asp Gly Glu
35 40 45
Arg Leu Val Val His Gly Leu Leu Pro Gly Gly Ser Ala Met Lys Ser
50 55 60
Gly Gln Val Leu Ile Gly Asp Val Leu Val Ala Val Asn Asp Val Asp
65 70 75 80
Val Thr Thr Glu Asn Ile Glu Arg Val Leu Ser Cys Ile Pro Gly Pro
85 90 95
Met Gln Val Lys Leu Thr Phe Glu Asn Ala Tyr Asp Val Lys Arg Glu
100 105 110
Thr

<210> 95
<211> 90
<212> PRT
<213> Homo sapiens

<400> 95
Thr Arg Gly Cys Glu Thr Val Glu Met Thr Leu Arg Arg Asn Gly Leu
1 5 10 15
Gly Gln Leu Gly Phe His Val Asn Phe Glu Gly Ile Val Ala Asp Val

```
            20                  25                  30
Glu Pro Phe Gly Phe Ala Trp Lys Ala Gly Leu Arg Gln Gly Ser Arg
        35                  40                  45
Leu Val Glu Ile Cys Lys Val Ala Val Ala Thr Leu Thr His Glu Gln
    50                  55                  60
Met Ile Asp Leu Leu Arg Thr Ser Val Thr Val Lys Val Val Ile Ile
65                  70                  75                  80
Gln Pro His Asp Asp Gly Ser Pro Arg Arg
                85                  90
```

<210> 96
<211> 96
<212> PRT
<213> Homo sapiens

<400> 96

```
Val Glu Asn Ile Leu Ala Lys Arg Leu Leu Ile Leu Pro Gln Glu Glu
 1               5                  10                  15
Asp Tyr Gly Phe Asp Ile Glu Glu Lys Asn Lys Ala Val Val Val Lys
            20                  25                  30
Ser Val Gln Arg Gly Ser Leu Ala Glu Val Ala Gly Leu Gln Val Gly
        35                  40                  45
Arg Lys Ile Tyr Ser Ile Asn Glu Asp Leu Val Phe Leu Arg Pro Phe
    50                  55                  60
Ser Glu Val Glu Ser Ile Leu Asn Gln Ser Phe Cys Ser Arg Arg Pro
65                  70                  75                  80
Leu Arg Leu Leu Val Ala Thr Lys Ala Lys Glu Ile Ile Lys Ile Pro
                85                  90                  95
```

<210> 97
<211> 103
<212> PRT
<213> Homo sapiens

<400> 97

```
Pro Asp Ser Ala Gly Pro Gly Glu Val Arg Leu Val Ser Leu Arg Arg
 1               5                  10                  15
Ala Lys Ala His Glu Gly Leu Gly Phe Ser Ile Arg Gly Gly Ser Glu
            20                  25                  30
His Gly Val Gly Ile Tyr Val Ser Leu Val Glu Pro Gly Ser Leu Ala
        35                  40                  45
Glu Lys Glu Gly Leu Arg Val Gly Asp Gln Ile Leu Arg Val Asn Asp
    50                  55                  60
Lys Ser Leu Ala Arg Val Thr His Ala Glu Ala Val Lys Ala Leu Lys
65                  70                  75                  80
Gly Ser Lys Lys Leu Val Leu Ser Val Tyr Ser Ala Gly Arg Ile Pro
                85                  90                  95
Gly Gly Tyr Val Thr Asn His
            100
```

<210> 98
<211> 100
<212> PRT
<213> Homo sapiens

<400> 98

```
Leu Gln Gly Gly Asp Glu Lys Lys Val Asn Leu Val Leu Gly Asp Gly
```

```
 1               5                  10                  15
Arg Ser Leu Gly Leu Thr Ile Arg Gly Gly Ala Glu Tyr Gly Leu Gly
            20                  25                  30
Ile Tyr Ile Thr Gly Val Asp Pro Gly Ser Glu Ala Glu Gly Ser Gly
        35                  40                  45
Leu Lys Val Gly Asp Gln Ile Leu Glu Val Asn Trp Arg Ser Phe Leu
    50                  55                  60
Asn Ile Leu His Asp Glu Ala Val Arg Leu Leu Lys Ser Ser Arg His
65                  70                  75                  80
Leu Ile Leu Thr Val Lys Asp Val Gly Arg Leu Pro His Ala Arg Thr
                85                  90                  95
Thr Val Asp Glu
            100
```

<210> 99
<211> 87
<212> PRT
<213> Homo sapiens

<400> 99

```
Trp Thr Ser Gly Ala His Val His Ser Gly Pro Cys Glu Glu Lys Cys
 1               5                  10                  15
Gly His Pro Gly His Arg Gln Pro Leu Pro Arg Ile Val Thr Ile Gln
            20                  25                  30
Arg Gly Gly Ser Ala His Asn Cys Gly Gln Leu Lys Val Gly His Val
        35                  40                  45
Ile Leu Glu Val Asn Gly Leu Thr Leu Arg Gly Lys Glu His Arg Glu
    50                  55                  60
Ala Ala Arg Ile Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp Tyr
65                  70                  75                  80
Ile Asp Phe Leu Asp Ser Leu
                85
```

<210> 100
<211> 100
<212> PRT
<213> Homo sapiens

<400> 100

```
Glu Leu Arg Arg Ala Glu Leu Val Glu Ile Ile Val Glu Thr Glu Ala
 1               5                  10                  15
Gln Thr Gly Val Ser Gly Ile Asn Val Ala Gly Gly Gly Lys Glu Gly
            20                  25                  30
Ile Phe Val Arg Glu Leu Arg Glu Asp Ser Pro Ala Ala Arg Ser Leu
        35                  40                  45
Ser Leu Gln Glu Gly Asp Gln Leu Leu Ser Ala Arg Val Phe Phe Glu
    50                  55                  60
Asn Phe Lys Tyr Glu Asp Ala Leu Arg Leu Leu Gln Cys Ala Glu Pro
65                  70                  75                  80
Tyr Lys Val Ser Phe Cys Leu Lys Arg Thr Val Pro Thr Gly Asp Leu
                85                  90                  95
Ala Leu Arg Pro
            100
```

<210> 101
<211> 102
<212> PRT

<213> Homo sapiens

<400> 101
Pro Ser Gln Leu Lys Gly Val Leu Val Arg Ala Ser Leu Lys Lys Ser
 1   5   10   15
Thr Met Gly Phe Gly Phe Thr Ile Ile Gly Gly Asp Arg Pro Asp Glu
            20   25   30
Phe Leu Gln Val Lys Asn Val Leu Lys Asp Gly Pro Ala Ala Gln Asp
        35   40   45
Gly Lys Ile Ala Pro Gly Asp Val Ile Val Asp Ile Asn Gly Asn Cys
    50   55   60
Val Leu Gly His Thr His Ala Asp Val Val Gln Met Phe Gln Leu Val
65   70   75   80
Pro Val Asn Gln Tyr Val Asn Leu Thr Leu Cys Arg Gly Tyr Pro Leu
                85   90   95
Pro Asp Asp Ser Glu Asp
            100

<210> 102
<211> 100
<212> PRT
<213> Homo sapiens

<400> 102
Ala Ser Ser Gly Ser Ser Gln Pro Glu Leu Val Thr Ile Pro Leu Ile
 1   5   10   15
Lys Gly Pro Lys Gly Phe Gly Phe Ala Ile Ala Asp Ser Pro Thr Gly
            20   25   30
Gln Lys Val Lys Met Ile Leu Asp Ser Gln Trp Cys Gln Gly Leu Gln
        35   40   45
Lys Gly Asp Ile Ile Lys Glu Ile Tyr His Gln Asn Val Gln Asn Leu
    50   55   60
Thr His Leu Gln Val Val Glu Val Leu Lys Gln Phe Pro Val Gly Ala
65   70   75   80
Asp Val Pro Leu Leu Ile Leu Arg Gly Gly Pro Pro Ser Pro Thr Lys
                85   90   95
Thr Ala Lys Met
            100

<210> 103
<211> 143
<212> PRT
<213> Homo sapiens

<400> 103
Leu Tyr Glu Asp Lys Pro Pro Leu Thr Asn Thr Phe Leu Ile Ser Asn
 1   5   10   15
Pro Arg Thr Thr Ala Asp Pro Arg Ile Leu Tyr Glu Asp Lys Pro Pro
            20   25   30
Asn Thr Lys Asp Leu Asp Val Phe Leu Arg Lys Gln Glu Ser Gly Phe
        35   40   45
Gly Phe Arg Val Leu Gly Gly Asp Gly Pro Asp Gln Ser Ile Tyr Ile
    50   55   60
Gly Ala Ile Ile Pro Leu Gly Ala Ala Glu Lys Asp Gly Arg Leu Arg
65   70   75   80
Ala Ala Asp Glu Leu Met Cys Ile Asp Gly Ile Pro Val Lys Gly Lys
                85   90   95
Ser His Lys Gln Val Leu Asp Leu Met Thr Thr Ala Ala Arg Asn Gly

```
            100                 105                 110
His Val Leu Leu Thr Val Arg Arg Lys Ile Phe Tyr Gly Glu Lys Gln
        115                 120                 125
Pro Glu Asp Asp Ser Gly Ser Pro Gly Ile His Arg Glu Leu Thr
    130                 135                 140


<210> 104
<211> 102
<212> PRT
<213> Homo sapiens

<400> 104
Pro Ala Pro Gln Glu Pro Tyr Asp Val Val Leu Gln Arg Lys Glu Asn
 1               5                  10                  15
Glu Gly Phe Gly Phe Val Ile Leu Thr Ser Lys Asn Lys Pro Pro Pro
            20                  25                  30
Gly Val Ile Pro His Lys Ile Gly Arg Val Ile Glu Gly Ser Pro Ala
        35                  40                  45
Asp Arg Cys Gly Lys Leu Lys Val Gly Asp His Ile Ser Ala Val Asn
    50                  55                  60
Gly Gln Ser Ile Val Glu Leu Ser His Asp Asn Ile Val Gln Leu Ile
65                  70                  75                  80
Lys Asp Ala Gly Val Thr Val Thr Leu Thr Val Ile Ala Glu Glu Glu
                85                  90                  95
His His Gly Pro Pro Ser
            100


<210> 105
<211> 98
<212> PRT
<213> Homo sapiens

<400> 105
Gln Asn Leu Gly Cys Tyr Pro Val Glu Leu Glu Arg Gly Pro Arg Gly
 1               5                  10                  15
Phe Gly Phe Ser Leu Arg Gly Gly Lys Glu Tyr Asn Met Gly Leu Phe
            20                  25                  30
Ile Leu Arg Leu Ala Glu Asp Gly Pro Ala Ile Lys Asp Gly Arg Ile
        35                  40                  45
His Val Gly Asp Gln Ile Val Glu Ile Asn Gly Glu Pro Thr Gln Gly
    50                  55                  60
Ile Thr His Thr Arg Ala Ile Glu Leu Ile Gln Ala Gly Gly Asn Lys
65                  70                  75                  80
Val Leu Leu Leu Leu Arg Pro Gly Thr Gly Leu Ile Pro Asp His Gly
                85                  90                  95
Leu Ala


<210> 106
<211> 84
<212> PRT
<213> Homo sapiens

<400> 106
Ile Thr Val Val Glu Leu Ile Lys Lys Glu Gly Ser Thr Leu Gly Leu
 1               5                  10                  15
Thr Ile Ser Gly Gly Thr Asp Lys Asp Gly Lys Pro Arg Val Ser Asn
```

```
            20                  25                  30
Leu Arg Pro Gly Gly Leu Ala Ala Arg Ser Asp Leu Leu Asn Ile Gly
        35                  40                  45
Asp Tyr Ile Arg Ser Val Asn Gly Ile His Leu Thr Arg Leu Arg His
    50                  55                  60
Asp Glu Ile Ile Thr Leu Leu Lys Asn Val Gly Glu Arg Val Val Leu
65                  70                  75                  80
Glu Val Glu Tyr
```

<210> 107
<211> 92
<212> PRT
<213> Homo sapiens

<400> 107

```
Ile Leu Asp Val Ser Leu Tyr Lys Glu Gly Asn Ser Phe Gly Phe Val
 1               5                  10                  15
Leu Arg Gly Gly Ala His Glu Asp Gly His Lys Ser Arg Pro Leu Val
            20                  25                  30
Leu Thr Tyr Val Arg Pro Gly Gly Pro Ala Asp Arg Glu Gly Ser Leu
        35                  40                  45
Lys Val Gly Asp Arg Leu Leu Ser Val Asp Gly Ile Pro Leu His Gly
    50                  55                  60
Ala Ser His Ala Thr Ala Leu Ala Thr Leu Arg Gln Cys Ser His Glu
65                  70                  75                  80
Ala Leu Phe Gln Val Glu Tyr Asp Val Ala Thr Pro
                85                  90
```

<210> 108
<211> 102
<212> PRT
<213> Homo sapiens

<400> 108

```
Ile His Thr Val Ala Asn Ala Ser Gly Pro Leu Met Val Glu Ile Val
 1               5                  10                  15
Lys Thr Pro Gly Ser Ala Leu Gly Ile Ser Leu Thr Thr Thr Ser Leu
            20                  25                  30
Arg Asn Lys Ser Val Ile Thr Ile Asp Arg Ile Lys Pro Ala Ser Val
        35                  40                  45
Val Asp Arg Ser Gly Ala Leu His Pro Gly Asp His Ile Leu Ser Ile
    50                  55                  60
Asp Gly Thr Ser Met Glu His Cys Ser Leu Leu Glu Ala Thr Lys Leu
65                  70                  75                  80
Leu Ala Ser Ile Ser Glu Lys Val Arg Leu Glu Ile Leu Pro Val Pro
                85                  90                  95
Gln Ser Gln Arg Pro Leu
            100
```

<210> 109
<211> 103
<212> PRT
<213> Homo sapiens

<400> 109

```
Ile Gln Ile Val His Thr Glu Thr Thr Glu Val Val Leu Cys Gly Asp
```

```
 1               5                  10                  15
Pro Leu Ser Gly Phe Gly Leu Gln Leu Gln Gly Gly Ile Phe Ala Thr
            20                  25                  30
Glu Thr Leu Ser Ser Pro Pro Leu Val Cys Phe Ile Glu Pro Asp Ser
        35                  40                  45
Pro Ala Glu Arg Cys Gly Leu Leu Gln Val Gly Asp Arg Val Leu Ser
    50                  55                  60
Ile Asn Gly Ile Ala Thr Glu Asp Gly Thr Met Glu Glu Ala Asn Gln
65                  70                  75                  80
Leu Leu Arg Asp Ala Ala Leu Ala His Lys Val Val Leu Glu Val Glu
                85                  90                  95
Phe Asp Val Ala Glu Ser Val
            100


<210> 110
<211> 103
<212> PRT
<213> Homo sapiens

<400> 110
Ile Gln Phe Asp Val Ala Glu Ser Val Ile Pro Ser Ser Gly Thr Phe
 1               5                  10                  15
His Val Lys Leu Pro Lys Lys Arg Ser Val Glu Leu Gly Ile Thr Ile
            20                  25                  30
Ser Ser Ala Ser Arg Lys Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile
        35                  40                  45
Lys Lys Gly Ser Val Ala His Arg Thr Gly Thr Leu Glu Pro Gly Asp
    50                  55                  60
Lys Leu Leu Ala Ile Asp Asn Ile Arg Leu Asp Asn Cys Pro Met Glu
65                  70                  75                  80
Asp Ala Val Gln Ile Leu Arg Gln Cys Glu Asp Leu Val Lys Leu Lys
                85                  90                  95
Ile Arg Lys Asp Glu Asp Asn
            100


<210> 111
<211> 94
<212> PRT
<213> Homo sapiens

<400> 111
Ile Gln Thr Thr Gly Ala Val Ser Tyr Thr Val Glu Leu Lys Arg Tyr
 1               5                  10                  15
Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu Glu Pro Phe Asp
            20                  25                  30
Pro Ile Val Ile Ser Gly Leu Thr Lys Arg Gly Leu Ala Glu Arg Thr
        35                  40                  45
Gly Ala Ile His Val Gly Asp Arg Ile Leu Ala Ile Asn Asn Val Ser
    50                  55                  60
Leu Lys Gly Arg Pro Leu Ser Glu Ala Ile His Leu Leu Gln Val Ala
65                  70                  75                  80
Gly Glu Thr Val Thr Leu Lys Ile Lys Lys Gln Leu Asp Arg
                85                  90


<210> 112
<211> 105
<212> PRT
```

<213> Homo sapiens

<400> 112
Ile Leu Glu Met Glu Glu Leu Leu Leu Pro Thr Pro Leu Glu Met His
 1   5   10   15
Lys Val Thr Leu His Lys Asp Pro Met Arg His Asp Phe Gly Phe Ser
            20   25   30
Val Ser Asp Gly Leu Leu Glu Lys Gly Val Tyr Val His Thr Val Arg
        35   40   45
Pro Asp Gly Pro Ala His Arg Gly Gly Leu Gln Pro Phe Asp Arg Val
    50   55   60
Leu Gln Val Asn His Val Arg Thr Arg Asp Phe Asp Cys Cys Leu Ala
65   70   75   80
Val Pro Leu Leu Ala Glu Ala Gly Asp Val Leu Glu Leu Ile Ile Ser
                85   90   95
Arg Lys Pro His Thr Ala His Ser Ser
            100   105

<210> 113
<211> 91
<212> PRT
<213> Homo sapiens

<400> 113
Met Ala Leu Thr Val Asp Val Ala Gly Pro Ala Pro Trp Gly Phe Arg
 1   5   10   15
Ile Thr Gly Gly Arg Asp Phe His Thr Pro Ile Met Val Thr Lys Val
            20   25   30
Ala Glu Arg Gly Lys Ala Lys Asp Ala Asp Leu Arg Pro Gly Asp Ile
        35   40   45
Ile Val Ala Ile Asn Gly Glu Ser Ala Glu Gly Met Leu His Ala Glu
    50   55   60
Ala Gln Ser Lys Ile Arg Gln Ser Pro Ser Pro Leu Arg Leu Gln Leu
65   70   75   80
Asp Arg Ser Gln Ala Thr Ser Pro Gly Gln Thr
                85   90

<210> 114
<211> 84
<212> PRT
<213> Homo sapiens

<400> 114
Ser Asn Tyr Ser Val Ser Leu Val Gly Pro Ala Pro Trp Gly Phe Arg
 1   5   10   15
Leu Gln Gly Gly Lys Asp Phe Asn Met Pro Leu Thr Ile Ser Ser Leu
            20   25   30
Lys Asp Gly Gly Lys Ala Ala Gln Ala Asn Val Arg Ile Gly Asp Val
        35   40   45
Val Leu Ser Ile Asp Gly Ile Asn Ala Gln Gly Met Thr His Leu Glu
    50   55   60
Ala Gln Asn Lys Ile Lys Gly Cys Thr Gly Ser Leu Asn Met Thr Leu
65   70   75   80
Gln Arg Ala Ser

<210> 115

<211> 133
<212> PRT
<213> Homo sapiens

<400> 115
Thr Leu Val Glu His Ser Lys Leu Tyr Cys Gly His Cys Tyr Tyr Gln
 1   5   10   15
Thr Val Val Thr Pro Val Ile Glu Gln Ile Leu Pro Asp Ser Pro Gly
            20   25   30
Ser His Leu Pro His Thr Val Thr Leu Val Ser Ile Pro Ala Ser Ser
        35   40   45
His Gly Lys Arg Gly Leu Ser Val Ser Ile Asp Pro Pro His Gly Pro
    50   55   60
Pro Gly Cys Gly Thr Glu His Ser His Thr Val Arg Val Gln Gly Val
65   70   75   80
Asp Pro Gly Cys Met Ser Pro Asp Val Lys Asn Ser Ile His Val Gly
                85   90   95
Asp Arg Ile Leu Glu Ile Asn Gly Thr Pro Ile Arg Asn Val Pro Leu
            100   105   110
Asp Glu Ile Asp Leu Leu Ile Gln Glu Thr Ser Arg Leu Leu Gln Leu
        115   120   125
Thr Leu Glu His Asp
    130

<210> 116
<211> 92
<212> PRT
<213> Homo sapiens

<400> 116
Pro Tyr Ser Val Thr Leu Ile Ser Met Pro Ala Thr Thr Glu Gly Arg
 1   5   10   15
Arg Gly Phe Ser Val Ser Val Glu Ser Ala Cys Ser Asn Tyr Ala Thr
            20   25   30
Thr Val Gln Val Lys Glu Val Asn Arg Met His Ile Ser Pro Asn Asn
        35   40   45
Arg Asn Ala Ile His Pro Gly Asp Arg Ile Leu Glu Ile Asn Gly Thr
    50   55   60
Pro Val Arg Thr Leu Arg Val Glu Glu Val Glu Asp Ala Ile Ser Gln
65   70   75   80
Thr Ser Gln Thr Leu Gln Leu Leu Ile Glu His Asp
                85   90

<210> 117
<211> 82
<212> PRT
<213> Homo sapiens

<400> 117
Ile His Ser Val Thr Leu Arg Gly Pro Ser Pro Trp Gly Phe Arg Leu
 1   5   10   15
Val Gly Arg Asp Phe Ser Ala Pro Leu Thr Ile Ser Arg Val His Ala
            20   25   30
Gly Ser Lys Ala Ser Leu Ala Ala Leu Cys Pro Gly Asp Leu Ile Gln
        35   40   45
Ala Ile Asn Gly Glu Ser Thr Glu Leu Met Thr His Leu Glu Ala Gln
    50   55   60
Asn Arg Ile Lys Gly Cys His Asp His Leu Thr Leu Ser Val Ser Arg

65 70 75 80
Pro Glu

<210> 118
<211> 74
<212> PRT
<213> Homo sapiens

<400> 118
Val Cys Tyr Arg Thr Asp Asp Glu Glu Asp Leu Gly Ile Tyr Val Gly
1 5 10 15
Glu Val Asn Pro Asn Ser Ile Ala Ala Lys Asp Gly Arg Ile Arg Glu
20 25 30
Gly Asp Arg Ile Ile Gln Ile Asn Gly Val Asp Val Gln Asn Arg Glu
35 40 45
Glu Ala Val Ala Ile Leu Ser Gln Glu Glu Asn Thr Asn Ile Ser Leu
50 55 60
Leu Val Ala Arg Pro Glu Ser Gln Leu Ala
65 70

<210> 119
<211> 103
<212> PRT
<213> Homo sapiens

<400> 119
Ile Gln Lys Lys Asn His Trp Thr Ser Arg Val His Glu Cys Thr Val
1 5 10 15
Lys Arg Gly Pro Gln Gly Glu Leu Gly Val Thr Val Leu Gly Gly Ala
20 25 30
Glu His Gly Glu Phe Pro Tyr Val Gly Ala Val Ala Ala Val Glu Ala
35 40 45
Ala Gly Leu Pro Gly Gly Gly Glu Gly Pro Arg Leu Gly Glu Gly Glu
50 55 60
Leu Leu Leu Glu Val Gln Gly Val Arg Val Ser Gly Leu Pro Arg Tyr
65 70 75 80
Asp Val Leu Gly Val Ile Asp Ser Cys Lys Glu Ala Val Thr Phe Lys
85 90 95
Ala Val Arg Gln Gly Gly Arg
100

<210> 120
<211> 104
<212> PRT
<213> Homo sapiens

<400> 120
Pro Ser Glu Leu Lys Gly Lys Phe Ile His Thr Lys Leu Arg Lys Ser
1 5 10 15
Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu Pro Asp Glu
20 25 30
Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala Ala Leu Asp
35 40 45
Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn Asp Thr Cys
50 55 60
Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe Gln Ser Ile

65 70 75 80
Pro Ile Gly Ala Ser Val Asp Leu Glu Leu Cys Arg Gly Tyr Pro Leu
85 90 95
Pro Phe Asp Pro Asp Asp Pro Asn
100

<210> 121
<211> 92
<212> PRT
<213> Homo sapiens

<400> 121
Pro Ala Thr Gln Pro Glu Leu Ile Thr Val His Ile Val Lys Gly Pro
1 5 10 15
Met Gly Phe Gly Phe Thr Ile Ala Asp Ser Pro Gly Gly Gly Gly Gln
20 25 30
Arg Val Lys Gln Ile Val Asp Ser Pro Arg Cys Arg Gly Leu Lys Glu
35 40 45
Gly Asp Leu Ile Val Glu Val Asn Lys Lys Asn Val Gln Ala Leu Thr
50 55 60
His Asn Gln Val Val Asp Met Leu Val Glu Cys Pro Lys Gly Ser Glu
65 70 75 80
Val Thr Leu Leu Val Gln Arg Gly Gly Asn Leu Ser
85 90

<210> 122
<211> 102
<212> PRT
<213> Homo sapiens

<400> 122
Pro Asp Tyr Gln Glu Gln Asp Ile Phe Leu Trp Arg Lys Glu Thr Gly
1 5 10 15
Phe Gly Phe Arg Ile Leu Gly Gly Asn Glu Pro Gly Glu Pro Ile Tyr
20 25 30
Ile Gly His Ile Val Pro Leu Gly Ala Ala Asp Thr Asp Gly Arg Leu
35 40 45
Arg Ser Gly Asp Glu Leu Ile Cys Val Asp Gly Thr Pro Val Ile Gly
50 55 60
Lys Ser His Gln Leu Val Val Gln Leu Met Gln Gln Ala Ala Lys Gln
65 70 75 80
Gly His Val Asn Leu Thr Val Arg Arg Lys Val Val Phe Ala Val Pro
85 90 95
Lys Thr Glu Asn Ser Ser
100

<210> 123
<211> 112
<212> PRT
<213> Homo sapiens

<400> 123
Gly Val Val Ser Thr Val Val Gln Pro Tyr Asp Val Glu Ile Arg Arg
1 5 10 15
Gly Glu Asn Glu Gly Phe Gly Phe Val Ile Val Ser Ser Val Ser Arg
20 25 30
Pro Glu Ala Gly Thr Thr Phe Ala Gly Asn Ala Cys Val Ala Met Pro

```
        35                  40                  45
His Lys Ile Gly Arg Ile Ile Glu Gly Ser Pro Ala Asp Arg Cys Gly
    50                  55                  60
Lys Leu Lys Val Gly Asp Arg Ile Leu Ala Val Asn Gly Cys Ser Ile
65                  70                  75                  80
Thr Asn Lys Ser His Ser Asp Ile Val Asn Leu Ile Lys Glu Ala Gly
                85                  90                  95
Asn Thr Val Thr Leu Arg Ile Ile Pro Gly Asp Glu Ser Ser Asn Ala
            100                 105                 110
```

<210> 124
<211> 91
<212> PRT
<213> Homo sapiens

<400> 124

```
Gln Ala Thr Gln Glu Gln Asp Phe Tyr Thr Val Glu Leu Glu Arg Gly
 1               5                  10                  15
Ala Lys Gly Phe Gly Phe Ser Leu Arg Gly Gly Arg Glu Tyr Asn Met
            20                  25                  30
Asp Leu Tyr Val Leu Arg Leu Ala Glu Asp Gly Pro Ala Glu Arg Cys
        35                  40                  45
Gly Lys Met Arg Ile Gly Asp Glu Ile Leu Glu Ile Asn Gly Glu Thr
    50                  55                  60
Thr Lys Asn Met Lys His Ser Arg Ala Ile Glu Leu Ile Lys Asn Gly
65                  70                  75                  80
Gly Arg Arg Val Arg Leu Phe Leu Lys Arg Gly
                85                  90
```

<210> 125
<211> 100
<212> PRT
<213> Homo sapiens

<400> 125

```
Pro Ala Lys Met Glu Lys Glu Glu Thr Thr Arg Glu Leu Leu Leu Pro
 1               5                  10                  15
Asn Trp Gln Gly Ser Gly Ser His Gly Leu Thr Ile Ala Gln Arg Asp
            20                  25                  30
Asp Gly Val Phe Val Gln Glu Val Thr Gln Asn Ser Pro Ala Ala Arg
        35                  40                  45
Thr Gly Val Val Lys Glu Gly Asp Gln Ile Val Gly Ala Thr Ile Tyr
    50                  55                  60
Phe Asp Asn Leu Gln Ser Gly Glu Val Thr Gln Leu Leu Asn Thr Met
65                  70                  75                  80
Gly His His Thr Val Gly Leu Lys Leu His Arg Lys Gly Asp Arg Ser
                85                  90                  95
Pro Asn Ser Ser
            100
```

<210> 126
<211> 97
<212> PRT
<213> Homo sapiens

<400> 126

```
Ser Glu Asn Cys Lys Val Phe Ile Glu Lys Gln Lys Gly Glu Ile Leu
```

```
 1               5                  10                  15
Gly Val Val Ile Val Glu Ser Gly Trp Gly Ser Ile Leu Pro Thr Val
            20                  25                  30
Ile Ile Ala Asn Met Met His Gly Gly Pro Ala Glu Lys Ser Gly Lys
        35                  40                  45
Leu Asn Ile Gly Asp Gln Ile Met Ser Ile Asn Gly Thr Ser Leu Val
    50                  55                  60
Gly Leu Pro Leu Ser Thr Cys Gln Ser Ile Ile Lys Gly Leu Lys Asn
65                  70                  75                  80
Gln Ser Arg Val Lys Leu Asn Ile Val Arg Cys Pro Pro Val Asn Ser
                85                  90                  95
Ser
```

<210> 127
<211> 92
<212> PRT
<213> Homo sapiens

<400> 127

```
Leu Arg Cys Pro Pro Val Thr Thr Val Leu Ile Arg Arg Pro Asp Leu
 1               5                  10                  15
Arg Tyr Gln Leu Gly Phe Ser Val Gln Asn Gly Ile Ile Cys Ser Leu
            20                  25                  30
Met Arg Gly Gly Ile Ala Glu Arg Gly Gly Val Arg Val Gly His Arg
        35                  40                  45
Ile Ile Glu Ile Asn Gly Gln Ser Val Val Ala Thr Pro His Glu Lys
    50                  55                  60
Ile Val His Ile Leu Ser Asn Ala Val Gly Glu Ile His Met Lys Thr
65                  70                  75                  80
Met Pro Ala Ala Met Tyr Arg Leu Leu Asn Ser Ser
                85                  90
```

<210> 128
<211> 103
<212> PRT
<213> Homo sapiens

<400> 128

```
Leu Ser Asn Ser Asp Asn Cys Arg Glu Val His Leu Glu Lys Arg Arg
 1               5                  10                  15
Gly Glu Gly Leu Gly Val Ala Leu Val Glu Ser Gly Trp Gly Ser Leu
            20                  25                  30
Leu Pro Thr Ala Val Ile Ala Asn Leu Leu His Gly Gly Pro Ala Glu
        35                  40                  45
Arg Ser Gly Ala Leu Ser Ile Gly Asp Arg Leu Thr Ala Ile Asn Gly
    50                  55                  60
Thr Ser Leu Val Gly Leu Pro Leu Ala Ala Cys Gln Ala Ala Val Arg
65                  70                  75                  80
Glu Thr Lys Ser Gln Thr Ser Val Thr Leu Ser Ile Val His Cys Pro
                85                  90                  95
Pro Val Thr Thr Ala Ile Met
            100
```

<210> 129
<211> 92
<212> PRT

<213> Homo sapiens

<400> 129
Leu Val His Cys Pro Pro Val Thr Thr Ala Ile Ile His Arg Pro His
 1   5   10   15
Ala Arg Glu Gln Leu Gly Phe Cys Val Glu Asp Gly Ile Ile Cys Ser
            20   25   30
Leu Leu Arg Gly Gly Ile Ala Glu Arg Gly Gly Ile Arg Val Gly His
        35   40   45
Arg Ile Ile Glu Ile Asn Gly Gln Ser Val Val Ala Thr Pro His Ala
    50   55   60
Arg Ile Ile Glu Leu Leu Thr Glu Ala Tyr Gly Glu Val His Ile Lys
65   70   75   80
Thr Met Pro Ala Ala Thr Tyr Arg Leu Leu Thr Gly
                85   90

<210> 130
<211> 86
<212> PRT
<213> Homo sapiens

<400> 130
Arg Lys Val Arg Leu Ile Gln Phe Glu Lys Val Thr Glu Glu Pro Met
 1   5   10   15
Gly Ile Thr Leu Lys Leu Asn Glu Lys Gln Ser Cys Thr Val Ala Arg
            20   25   30
Ile Leu His Gly Gly Met Ile His Arg Gln Gly Ser Leu His Val Gly
        35   40   45
Asp Glu Ile Leu Glu Ile Asn Gly Thr Asn Val Thr Asn His Ser Val
    50   55   60
Asp Gln Leu Gln Lys Ala Met Lys Glu Thr Lys Gly Met Ile Ser Leu
65   70   75   80
Lys Val Ile Pro Asn Gln
                85

<210> 131
<211> 89
<212> PRT
<213> Homo sapiens

<400> 131
Pro Val Pro Pro Asp Ala Val Arg Met Val Gly Ile Arg Lys Thr Ala
 1   5   10   15
Gly Glu His Leu Gly Val Thr Phe Arg Val Glu Gly Gly Glu Leu Val
            20   25   30
Ile Ala Arg Ile Leu His Gly Gly Met Val Ala Gln Gln Gly Leu Leu
        35   40   45
His Val Gly Asp Ile Ile Lys Glu Val Asn Gly Gln Pro Val Gly Ser
    50   55   60
Asp Pro Arg Ala Leu Gln Glu Leu Leu Arg Asn Ala Ser Gly Ser Val
65   70   75   80
Ile Leu Lys Ile Leu Pro Asn Tyr Gln
                85

<210> 132
<211> 99
<212> PRT

<213> Homo sapiens

<400> 132
Gln Gly Arg His Val Glu Val Phe Glu Leu Leu Lys Pro Pro Ser Gly
 1   5   10   15
Gly Leu Gly Phe Ser Val Val Gly Leu Arg Ser Glu Asn Arg Gly Glu
            20   25   30
Leu Gly Ile Phe Val Gln Glu Ile Gln Glu Gly Ser Val Ala His Arg
        35   40   45
Asp Gly Arg Leu Lys Glu Thr Asp Gln Ile Leu Ala Ile Asn Gly Gln
    50   55   60
Ala Leu Asp Gln Thr Ile Thr His Gln Gln Ala Ile Ser Ile Leu Gln
65   70   75   80
Lys Ala Lys Asp Thr Val Gln Leu Val Ile Ala Arg Gly Ser Leu Pro
                85   90   95
Gln Leu Val

<210> 133
<211> 97
<212> PRT
<213> Homo sapiens

<400> 133
Pro Val His Trp Gln His Met Glu Thr Ile Glu Leu Val Asn Asp Gly
 1   5   10   15
Ser Gly Leu Gly Phe Gly Ile Ile Gly Gly Lys Ala Thr Gly Val Ile
            20   25   30
Val Lys Thr Ile Leu Pro Gly Gly Val Ala Asp Gln His Gly Arg Leu
        35   40   45
Cys Ser Gly Asp His Ile Leu Lys Ile Gly Asp Thr Asp Leu Ala Gly
    50   55   60
Met Ser Ser Glu Gln Val Ala Gln Val Leu Arg Gln Cys Gly Asn Arg
65   70   75   80
Val Lys Leu Met Ile Ala Arg Gly Ala Ile Glu Glu Arg Thr Ala Pro
                85   90   95
Thr

<210> 134
<211> 98
<212> PRT
<213> Homo sapiens

<400> 134
Gln Glu Ser Glu Thr Phe Asp Val Glu Leu Thr Lys Asn Val Gln Gly
 1   5   10   15
Leu Gly Ile Thr Ile Ala Gly Tyr Ile Gly Asp Lys Lys Leu Glu Pro
            20   25   30
Ser Gly Ile Phe Val Lys Ser Ile Thr Lys Ser Ser Ala Val Glu His
        35   40   45
Asp Gly Arg Ile Gln Ile Gly Asp Gln Ile Ile Ala Val Asp Gly Thr
    50   55   60
Asn Leu Gln Gly Phe Thr Asn Gln Gln Ala Val Glu Val Leu Arg His
65   70   75   80
Thr Gly Gln Thr Val Leu Leu Thr Leu Met Arg Arg Gly Met Lys Gln
                85   90   95
Glu Ala

<210> 135
<211> 92
<212> PRT
<213> Homo sapiens

<400> 135
Leu Asn Tyr Glu Ile Val Val Ala His Val Ser Lys Phe Ser Glu Asn
 1   5   10   15
Ser Gly Leu Gly Ile Ser Leu Glu Ala Thr Val Gly His His Phe Ile
            20   25   30
Arg Ser Val Leu Pro Glu Gly Pro Val Gly His Ser Gly Lys Leu Phe
        35   40   45
Ser Gly Asp Glu Leu Leu Glu Val Asn Gly Ile Thr Leu Leu Gly Glu
    50   55   60
Asn His Gln Asp Val Val Asn Ile Leu Lys Glu Leu Pro Ile Glu Val
65   70   75   80
Thr Met Val Cys Cys Arg Arg Thr Val Pro Pro Thr
                85   90

<210> 136
<211> 100
<212> PRT
<213> Homo sapiens

<400> 136
Trp Glu Ala Gly Ile Gln His Ile Glu Leu Glu Lys Gly Ser Lys Gly
 1   5   10   15
Leu Gly Phe Ser Ile Leu Asp Tyr Gln Asp Pro Ile Asp Pro Ala Ser
            20   25   30
Thr Val Ile Ile Ile Arg Ser Leu Val Pro Gly Gly Ile Ala Glu Lys
        35   40   45
Asp Gly Arg Leu Leu Pro Gly Asp Arg Leu Met Phe Val Asn Asp Val
    50   55   60
Asn Leu Glu Asn Ser Ser Leu Glu Glu Ala Val Glu Ala Leu Lys Gly
65   70   75   80
Ala Pro Ser Gly Thr Val Arg Ile Gly Val Ala Lys Pro Leu Pro Leu
                85   90   95
Ser Pro Glu Glu
            100

<210> 137
<211> 99
<212> PRT
<213> Homo sapiens

<400> 137
Arg Asn Val Ser Lys Glu Ser Phe Glu Arg Thr Ile Asn Ile Ala Lys
 1   5   10   15
Gly Asn Ser Ser Leu Gly Met Thr Val Ser Ala Asn Lys Asp Gly Leu
            20   25   30
Gly Met Ile Val Arg Ser Ile Ile His Gly Gly Ala Ile Ser Arg Asp
        35   40   45
Gly Arg Ile Ala Ile Gly Asp Cys Ile Leu Ser Ile Asn Glu Glu Ser
    50   55   60
Thr Ile Ser Val Thr Asn Ala Gln Ala Arg Ala Met Leu Arg Arg His

65 70 75 80
Ser Leu Ile Gly Pro Asp Ile Lys Ile Thr Tyr Val Pro Ala Glu His
85 90 95
Leu Glu Glu

<210> 138
<211> 112
<212> PRT
<213> Homo sapiens

<400> 138
Leu Asn Trp Asn Gln Pro Arg Arg Val Glu Leu Trp Arg Glu Pro Ser
1 5 10 15
Lys Ser Leu Gly Ile Ser Ile Val Gly Gly Arg Gly Met Gly Ser Arg
20 25 30
Leu Ser Asn Gly Glu Val Met Arg Gly Ile Phe Ile Lys His Val Leu
35 40 45
Glu Asp Ser Pro Ala Gly Lys Asn Gly Thr Leu Lys Pro Gly Asp Arg
50 55 60
Ile Val Glu Val Asp Gly Met Asp Leu Arg Asp Ala Ser His Glu Gln
65 70 75 80
Ala Val Glu Ala Ile Arg Lys Ala Gly Asn Pro Val Val Phe Met Val
85 90 95
Gln Ser Ile Ile Asn Arg Pro Arg Lys Ser Pro Leu Pro Ser Leu Leu
100 105 110

<210> 139
<211> 95
<212> PRT
<213> Homo sapiens

<400> 139
Leu Thr Gly Glu Leu His Met Ile Glu Leu Glu Lys Gly His Ser Gly
1 5 10 15
Leu Gly Leu Ser Leu Ala Gly Asn Lys Asp Arg Ser Arg Met Ser Val
20 25 30
Phe Ile Val Gly Ile Asp Pro Asn Gly Ala Ala Gly Lys Asp Gly Arg
35 40 45
Leu Gln Ile Ala Asp Glu Leu Leu Glu Ile Asn Gly Gln Ile Leu Tyr
50 55 60
Gly Arg Ser His Gln Asn Ala Ser Ser Ile Ile Lys Cys Ala Pro Ser
65 70 75 80
Lys Val Lys Ile Ile Phe Ile Arg Asn Lys Asp Ala Val Asn Gln
85 90 95

<210> 140
<211> 94
<212> PRT
<213> Homo sapiens

<400> 140
Leu Ser Ser Phe Lys Asn Val Gln His Leu Glu Leu Pro Lys Asp Gln
1 5 10 15
Gly Gly Leu Gly Ile Ala Ile Ser Glu Glu Asp Thr Leu Ser Gly Val
20 25 30
Ile Ile Lys Ser Leu Thr Glu His Gly Val Ala Ala Thr Asp Gly Arg

```
        35                  40                  45
Leu Lys Val Gly Asp Gln Ile Leu Ala Val Asp Asp Glu Ile Val Val
    50                  55                  60
Gly Tyr Pro Ile Glu Lys Phe Ile Ser Leu Leu Lys Thr Ala Lys Met
65                  70                  75                  80
Thr Val Lys Leu Thr Ile His Ala Glu Asn Pro Asp Ser Gln
                85                  90
```

<210> 141
<211> 95
<212> PRT
<213> Homo sapiens

<400> 141

```
Leu Pro Gly Cys Glu Thr Thr Ile Glu Ile Ser Lys Gly Arg Thr Gly
 1               5                  10                  15
Leu Gly Leu Ser Ile Val Gly Gly Ser Asp Thr Leu Leu Gly Ala Ile
            20                  25                  30
Ile Ile His Glu Val Tyr Glu Glu Gly Ala Ala Cys Lys Asp Gly Arg
        35                  40                  45
Leu Trp Ala Gly Asp Gln Ile Leu Glu Val Asn Gly Ile Asp Leu Arg
    50                  55                  60
Lys Ala Thr His Asp Glu Ala Ile Asn Val Leu Arg Gln Thr Pro Gln
65                  70                  75                  80
Arg Val Arg Leu Thr Leu Tyr Arg Asp Glu Ala Pro Tyr Lys Glu
                85                  90                  95
```

<210> 142
<211> 98
<212> PRT
<213> Homo sapiens

<400> 142

```
Lys Glu Glu Glu Val Cys Asp Thr Leu Thr Ile Glu Leu Gln Lys Lys
 1               5                  10                  15
Pro Gly Lys Gly Leu Gly Leu Ser Ile Val Gly Lys Arg Asn Asp Thr
            20                  25                  30
Gly Val Phe Val Ser Asp Ile Val Lys Gly Gly Ile Ala Asp Ala Asp
        35                  40                  45
Gly Arg Leu Met Gln Gly Asp Gln Ile Leu Met Val Asn Gly Glu Asp
    50                  55                  60
Val Arg Asn Ala Thr Gln Glu Ala Val Ala Ala Leu Leu Lys Cys Ser
65                  70                  75                  80
Leu Gly Thr Val Thr Leu Glu Val Gly Arg Ile Lys Ala Gly Pro Phe
                85                  90                  95
His Ser
```

<210> 143
<211> 96
<212> PRT
<213> Homo sapiens

<400> 143

```
Leu Gln Gly Leu Arg Thr Val Glu Met Lys Lys Gly Pro Thr Asp Ser
 1               5                  10                  15
Leu Gly Ile Ser Ile Ala Gly Gly Val Gly Ser Pro Leu Gly Asp Val
```

```
            20                  25                  30
Pro Ile Phe Ile Ala Met Met His Pro Thr Gly Val Ala Ala Gln Thr
        35                  40                  45
Gln Lys Leu Arg Val Gly Asp Arg Ile Val Thr Ile Cys Gly Thr Ser
    50                  55                  60
Thr Glu Gly Met Thr His Thr Gln Ala Val Asn Leu Leu Lys Asn Ala
65                  70                  75                  80
Ser Gly Ser Ile Glu Met Gln Val Val Ala Gly Gly Asp Val Ser Val
                85                  90                  95
```

<210> 144
<211> 91
<212> PRT
<213> Homo sapiens

<400> 144

```
Leu Gly Pro Pro Gln Cys Lys Ser Ile Thr Leu Glu Arg Gly Pro Asp
 1               5                  10                  15
Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro His Gly Asp
            20                  25                  30
Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala Ala Ser Glu
        35                  40                  45
Asp Gly Arg Leu Lys Arg Gly Asp Gln Ile Ile Ala Val Asn Gly Gln
    50                  55                  60
Ser Leu Glu Gly Val Thr His Glu Glu Ala Val Ala Ile Leu Lys Arg
65                  70                  75                  80
Thr Lys Gly Thr Val Thr Leu Met Val Leu Ser
                85                  90
```

<210> 145
<211> 93
<212> PRT
<213> Homo sapiens

<400> 145

```
Ile Gln Tyr Glu Glu Ile Val Leu Glu Arg Gly Asn Ser Gly Leu Gly
 1               5                  10                  15
Phe Ser Ile Ala Gly Gly Ile Asp Asn Pro His Val Pro Asp Asp Pro
            20                  25                  30
Gly Ile Phe Ile Thr Lys Ile Ile Pro Gly Gly Ala Ala Ala Met Asp
        35                  40                  45
Gly Arg Leu Gly Val Asn Asp Cys Val Leu Arg Val Asn Glu Val Glu
    50                  55                  60
Val Ser Glu Val Val His Ser Arg Ala Val Glu Ala Leu Lys Glu Ala
65                  70                  75                  80
Gly Pro Val Val Arg Leu Val Val Arg Arg Arg Gln Asn
                85                  90
```

<210> 146
<211> 90
<212> PRT
<213> Homo sapiens

<400> 146

```
Ile Thr Leu Leu Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly
 1               5                  10                  15
Gly Ile Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Ile Thr
```

```
            20                  25                  30
Lys Ile Ile Glu Gly Gly Ala Ala Gln Lys Asp Gly Arg Leu Gln Ile
        35                  40                  45
Gly Asp Arg Leu Leu Ala Val Asn Asn Thr Asn Leu Gln Asp Val Arg
    50                  55                  60
His Glu Glu Ala Val Ala Ser Leu Lys Asn Thr Ser Asp Met Val Tyr
65                  70                  75                  80
Leu Lys Val Ala Lys Pro Gly Ser Leu Glu
                85                  90
```

<210> 147
<211> 119
<212> PRT
<213> Homo sapiens

<400> 147

```
Ile Leu Leu His Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly
 1               5                  10                  15
Gly Glu Asp Gly Glu Gly Ile Phe Val Ser Phe Ile Leu Ala Gly Gly
            20                  25                  30
Pro Ala Asp Leu Ser Gly Glu Leu Arg Arg Gly Asp Arg Ile Leu Ser
        35                  40                  45
Val Asn Gly Val Asn Leu Arg Asn Ala Thr His Glu Gln Ala Ala Ala
    50                  55                  60
Ala Leu Lys Arg Ala Gly Gln Ser Val Thr Ile Val Ala Gln Tyr Arg
65                  70                  75                  80
Pro Glu Glu Tyr Ser Arg Phe Glu Ser Lys Ile His Asp Leu Arg Glu
                85                  90                  95
Gln Met Met Asn Ser Ser Met Ser Ser Gly Ser Gly Ser Leu Arg Thr
            100                 105                 110
Ser Glu Lys Arg Ser Leu Glu
        115
```

<210> 148
<211> 111
<212> PRT
<213> Homo sapiens

<400> 148

```
Cys Val Glu Arg Leu Glu Leu Phe Pro Val Glu Leu Glu Lys Asp Ser
 1               5                  10                  15
Glu Gly Leu Gly Ile Ser Ile Ile Gly Met Gly Ala Gly Ala Asp Met
            20                  25                  30
Gly Leu Glu Lys Leu Gly Ile Phe Val Lys Thr Val Thr Glu Gly Gly
        35                  40                  45
Ala Ala His Arg Asp Gly Arg Ile Gln Val Asn Asp Leu Leu Val Glu
    50                  55                  60
Val Asp Gly Thr Ser Leu Val Gly Val Thr Gln Ser Phe Ala Ala Ser
65                  70                  75                  80
Val Leu Arg Asn Thr Lys Gly Arg Val Arg Phe Met Ile Gly Arg Glu
                85                  90                  95
Arg Pro Gly Glu Gln Ser Glu Val Ala Gln Arg Ile His Arg Asp
            100                 105                 110
```

<210> 149
<211> 90
<212> PRT

<213> Homo sapiens

<400> 149
Ile Gln Pro Asn Val Ile Ser Val Arg Leu Phe Lys Arg Lys Val Gly
 1   5   10   15
Gly Leu Gly Phe Leu Val Lys Glu Arg Val Ser Lys Pro Pro Val Ile
            20   25   30
Ile Ser Asp Leu Ile Arg Gly Gly Ala Ala Glu Gln Ser Gly Leu Ile
        35   40   45
Gln Ala Gly Asp Ile Ile Leu Ala Val Asn Gly Arg Pro Leu Val Asp
    50   55   60
Leu Ser Tyr Asp Ser Ala Leu Glu Val Leu Arg Gly Ile Ala Ser Glu
65   70   75   80
Thr His Val Val Leu Ile Leu Arg Gly Pro
                85   90

<210> 150
<211> 107
<212> PRT
<213> Homo sapiens

<400> 150
Gln Ala Asn Ser Asp Glu Ser Asp Ile Ile His Ser Val Arg Val Glu
 1   5   10   15
Lys Ser Pro Ala Gly Arg Leu Gly Phe Ser Val Arg Gly Gly Ser Glu
            20   25   30
His Gly Leu Gly Ile Phe Val Ser Lys Val Glu Glu Gly Ser Ser Ala
        35   40   45
Glu Arg Ala Gly Leu Cys Val Gly Asp Lys Ile Thr Glu Val Asn Gly
    50   55   60
Leu Ser Leu Glu Ser Thr Thr Met Gly Ser Ala Val Lys Val Leu Thr
65   70   75   80
Ser Ser Ser Arg Leu His Met Met Val Arg Arg Met Gly Arg Val Pro
                85   90   95
Gly Ile Lys Phe Ser Lys Glu Lys Asn Ser Ser
            100   105

<210> 151
<211> 106
<212> PRT
<213> Homo sapiens

<400> 151
Pro Ser Asp Thr Ser Ser Glu Asp Gly Val Arg Arg Ile Val His Leu
 1   5   10   15
Tyr Thr Thr Ser Asp Asp Phe Cys Leu Gly Phe Asn Ile Arg Gly Gly
            20   25   30
Lys Glu Phe Gly Leu Gly Ile Tyr Val Ser Lys Val Asp His Gly Gly
        35   40   45
Leu Ala Glu Glu Asn Gly Ile Lys Val Gly Asp Gln Val Leu Ala Ala
    50   55   60
Asn Gly Val Arg Phe Asp Asp Ile Ser His Ser Gln Ala Val Glu Val
65   70   75   80
Leu Lys Gly Gln Thr His Ile Met Leu Thr Ile Lys Glu Thr Gly Arg
                85   90   95
Tyr Pro Ala Tyr Lys Glu Met Asn Ser Ser
            100   105

<210> 152
<211> 115
<212> PRT
<213> Homo sapiens

<400> 152
Lys Ile Lys Lys Phe Leu Thr Glu Ser His Asp Arg Gln Ala Lys Gly
 1   5   10   15
Lys Ala Ile Thr Lys Lys Lys Tyr Ile Gly Ile Arg Met Met Ser Leu
            20   25   30
Thr Ser Ser Lys Ala Lys Glu Leu Lys Asp Arg His Arg Asp Phe Pro
        35   40   45
Asp Val Ile Ser Gly Ala Tyr Ile Ile Glu Val Ile Pro Asp Thr Pro
    50   55   60
Ala Glu Ala Gly Gly Leu Lys Glu Asn Asp Val Ile Ile Ser Ile Asn
65   70   75   80
Gly Gln Ser Val Val Ser Ala Asn Asp Val Ser Asp Val Ile Lys Arg
                85   90   95
Glu Ser Thr Leu Asn Met Val Val Arg Arg Gly Asn Glu Asp Ile Met
            100   105   110
Ile Thr Val
        115

<210> 153
<211> 100
<212> PRT
<213> Homo sapiens

<400> 153
Pro Asp Gly Glu Ile Thr Ser Ile Lys Ile Asn Arg Val Asp Pro Ser
 1   5   10   15
Glu Ser Leu Ser Ile Arg Leu Val Gly Gly Ser Glu Thr Pro Leu Val
            20   25   30
His Ile Ile Ile Gln His Ile Tyr Arg Asp Gly Val Ile Ala Arg Asp
        35   40   45
Gly Arg Leu Leu Pro Gly Asp Ile Ile Leu Lys Val Asn Gly Met Asp
    50   55   60
Ile Ser Asn Val Pro His Asn Tyr Ala Val Arg Leu Leu Arg Gln Pro
65   70   75   80
Cys Gln Val Leu Trp Leu Thr Val Met Arg Glu Gln Lys Phe Arg Ser
                85   90   95
Arg Asn Ser Ser
            100

<210> 154
<211> 101
<212> PRT
<213> Homo sapiens

<400> 154
His Arg Pro Arg Asp Asp Ser Phe His Val Ile Leu Asn Lys Ser Ser
 1   5   10   15
Pro Glu Glu Gln Leu Gly Ile Lys Leu Val Arg Lys Val Asp Glu Pro
            20   25   30
Gly Val Phe Ile Phe Asn Val Leu Asp Gly Gly Val Ala Tyr Arg His
        35   40   45
Gly Gln Leu Glu Glu Asn Asp Arg Val Leu Ala Ile Asn Gly His Asp

```
    50                  55                  60
Leu Arg Tyr Gly Ser Pro Glu Ser Ala Ala His Leu Ile Gln Ala Ser
65                  70                  75                  80
Glu Arg Arg Val His Leu Val Val Ser Arg Gln Val Arg Gln Arg Ser
                85                  90                  95
Pro Glu Asn Ser Ser
            100


<210> 155
<211> 104
<212> PRT
<213> Homo sapiens

<400> 155
Pro Thr Ile Thr Cys His Glu Lys Val Val Asn Ile Gln Lys Asp Pro
 1               5                  10                  15
Gly Glu Ser Leu Gly Met Thr Val Ala Gly Gly Ala Ser His Arg Glu
            20                  25                  30
Trp Asp Leu Pro Ile Tyr Val Ile Ser Val Glu Pro Gly Gly Val Ile
        35                  40                  45
Ser Arg Asp Gly Arg Ile Lys Thr Gly Asp Ile Leu Leu Asn Val Asp
    50                  55                  60
Gly Val Glu Leu Thr Glu Val Ser Arg Ser Glu Ala Val Ala Leu Leu
65                  70                  75                  80
Lys Arg Thr Ser Ser Ser Ile Val Leu Lys Ala Leu Glu Val Lys Glu
                85                  90                  95
Tyr Glu Pro Gln Glu Phe Ile Val
            100


<210> 156
<211> 99
<212> PRT
<213> Homo sapiens

<400> 156
Pro Arg Cys Leu Tyr Asn Cys Lys Asp Ile Val Leu Arg Arg Asn Thr
 1               5                  10                  15
Ala Gly Ser Leu Gly Phe Cys Ile Val Gly Gly Tyr Glu Glu Tyr Asn
            20                  25                  30
Gly Asn Lys Pro Phe Phe Ile Lys Ser Ile Val Glu Gly Thr Pro Ala
        35                  40                  45
Tyr Asn Asp Gly Arg Ile Arg Cys Gly Asp Ile Leu Leu Ala Val Asn
    50                  55                  60
Gly Arg Ser Thr Ser Gly Met Ile His Ala Cys Leu Ala Arg Leu Leu
65                  70                  75                  80
Lys Glu Leu Lys Gly Arg Ile Thr Leu Thr Ile Val Ser Trp Pro Gly
                85                  90                  95
Thr Phe Leu


<210> 157
<211> 101
<212> PRT
<213> Homo sapiens

<400> 157
Leu Leu Thr Glu Glu Glu Ile Asn Leu Thr Arg Gly Pro Ser Gly Leu
```

```
 1               5                  10                  15
Gly Phe Asn Ile Val Gly Gly Thr Asp Gln Gln Tyr Val Ser Asn Asp
            20                  25                  30
Ser Gly Ile Tyr Val Ser Arg Ile Lys Glu Asn Gly Ala Ala Ala Leu
        35                  40                  45
Asp Gly Arg Leu Gln Glu Gly Asp Lys Ile Leu Ser Val Asn Gly Gln
    50                  55                  60
Asp Leu Lys Asn Leu Leu His Gln Asp Ala Val Asp Leu Phe Arg Asn
65                  70                  75                  80
Ala Gly Tyr Ala Val Ser Leu Arg Val Gln His Arg Leu Gln Val Gln
                85                  90                  95
Asn Gly Ile His Ser
            100
```

<210> 158
<211> 94
<212> PRT
<213> Homo sapiens

<400> 158

```
Pro Val Asp Ala Ile Arg Ile Leu Gly Ile His Lys Arg Ala Gly Glu
 1               5                  10                  15
Pro Leu Gly Val Thr Phe Arg Val Glu Asn Asn Asp Leu Val Ile Ala
            20                  25                  30
Arg Ile Leu His Gly Gly Met Ile Asp Arg Gln Gly Leu Leu His Val
        35                  40                  45
Gly Asp Ile Ile Lys Glu Val Asn Gly His Glu Val Gly Asn Asn Pro
    50                  55                  60
Lys Glu Leu Gln Glu Leu Leu Lys Asn Ile Ser Gly Ser Val Thr Leu
65                  70                  75                  80
Lys Ile Leu Pro Ser Tyr Arg Asp Thr Ile Thr Pro Gln Gln
                85                  90
```

<210> 159
<211> 93
<212> PRT
<213> Homo sapiens

<400> 159

```
Asp Asp Met Val Lys Leu Val Glu Val Pro Asn Asp Gly Gly Pro Leu
 1               5                  10                  15
Gly Ile His Val Val Pro Phe Ser Ala Arg Gly Gly Arg Thr Leu Gly
            20                  25                  30
Leu Leu Val Lys Arg Leu Glu Lys Gly Gly Lys Ala Glu His Glu Asn
        35                  40                  45
Leu Phe Arg Glu Asn Asp Cys Ile Val Arg Ile Asn Asp Gly Asp Leu
    50                  55                  60
Arg Asn Arg Arg Phe Glu Gln Ala Gln His Met Phe Arg Gln Ala Met
65                  70                  75                  80
Arg Thr Pro Ile Ile Trp Phe His Val Val Pro Ala Ala
                85                  90
```

<210> 160
<211> 94
<212> PRT
<213> Homo sapiens

<400> 160
Gly Lys Arg Leu Asn Ile Gln Leu Lys Lys Gly Thr Glu Gly Leu Gly
 1   5   10   15
Phe Ser Ile Thr Ser Arg Asp Val Thr Ile Gly Gly Ser Ala Pro Ile
            20   25   30
Tyr Val Lys Asn Ile Leu Pro Arg Gly Ala Ala Ile Gln Asp Gly Arg
        35   40   45
Leu Lys Ala Gly Asp Arg Leu Ile Glu Val Asn Gly Val Asp Leu Val
    50   55   60
Gly Lys Ser Gln Glu Glu Val Val Ser Leu Leu Arg Ser Thr Lys Met
65   70   75   80
Glu Gly Thr Val Ser Leu Leu Val Phe Arg Gln Glu Asp Ala
                85   90

<210> 161
<211> 103
<212> PRT
<213> Homo sapiens

<400> 161
Thr Pro Asp Gly Thr Arg Glu Phe Leu Thr Phe Glu Val Pro Leu Asn
 1   5   10   15
Asp Ser Gly Ser Ala Gly Leu Gly Val Ser Val Lys Gly Asn Arg Ser
            20   25   30
Lys Glu Asn His Ala Asp Leu Gly Ile Phe Val Lys Ser Ile Ile Asn
        35   40   45
Gly Gly Ala Ala Ser Lys Asp Gly Arg Leu Arg Val Asn Asp Gln Leu
    50   55   60
Ile Ala Val Asn Gly Glu Ser Leu Leu Gly Lys Thr Asn Gln Asp Ala
65   70   75   80
Met Glu Thr Leu Arg Arg Ser Met Ser Thr Glu Gly Asn Lys Arg Gly
                85   90   95
Met Ile Gln Leu Ile Val Ala
            100

<210> 162
<211> 102
<212> PRT
<213> Homo sapiens

<400> 162
Leu Pro Glu Thr His Arg Arg Val Arg Leu His Lys His Gly Ser Asp
 1   5   10   15
Arg Pro Leu Gly Phe Tyr Ile Arg Asp Gly Met Ser Val Arg Val Ala
            20   25   30
Pro Gln Gly Leu Glu Arg Val Pro Gly Ile Phe Ile Ser Arg Leu Val
        35   40   45
Arg Gly Gly Leu Ala Glu Ser Thr Gly Leu Leu Ala Val Ser Asp Glu
    50   55   60
Ile Leu Glu Val Asn Gly Ile Glu Val Ala Gly Lys Thr Leu Asp Gln
65   70   75   80
Val Thr Asp Met Met Val Ala Asn Ser His Asn Leu Ile Val Thr Val
                85   90   95
Lys Pro Ala Asn Gln Arg
            100

<210> 163

<211> 111
<212> PRT
<213> Homo sapiens

<400> 163
Ile Asp Val Asp Leu Val Pro Glu Thr His Arg Arg Val Arg Leu His
 1   5   10   15
Arg His Gly Cys Glu Lys Pro Leu Gly Phe Tyr Ile Arg Asp Gly Ala
            20   25   30
Ser Val Arg Val Thr Pro His Gly Leu Glu Lys Val Pro Gly Ile Phe
        35   40   45
Ile Ser Arg Met Val Pro Gly Gly Leu Ala Glu Ser Thr Gly Leu Leu
    50   55   60
Ala Val Asn Asp Glu Val Leu Glu Val Asn Gly Ile Glu Val Ala Gly
65   70   75   80
Lys Thr Leu Asp Gln Val Thr Asp Met Met Ile Ala Asn Ser His Asn
                85   90   95
Leu Ile Val Thr Val Lys Pro Ala Asn Gln Arg Asn Asn Val Val
            100   105   110

<210> 164
<211> 100
<212> PRT
<213> Homo sapiens

<400> 164
Arg Ser Arg Lys Leu Lys Glu Val Arg Leu Asp Arg Leu His Pro Glu
 1   5   10   15
Gly Leu Gly Leu Ser Val Arg Gly Gly Leu Glu Phe Gly Cys Gly Leu
            20   25   30
Phe Ile Ser His Leu Ile Lys Gly Gly Gln Ala Asp Ser Val Gly Leu
        35   40   45
Gln Val Gly Asp Glu Ile Val Arg Ile Asn Gly Tyr Ser Ile Ser Ser
    50   55   60
Cys Thr His Glu Glu Val Ile Asn Leu Ile Arg Thr Lys Lys Thr Val
65   70   75   80
Ser Ile Lys Val Arg His Ile Gly Leu Ile Pro Val Lys Ser Ser Pro
                85   90   95
Asp Glu Phe His
            100

<210> 165
<211> 102
<212> PRT
<213> Homo sapiens

<400> 165
Ile Pro Gly Asn Arg Glu Asn Lys Glu Lys Lys Val Phe Ile Ser Leu
 1   5   10   15
Val Gly Ser Arg Gly Leu Gly Cys Ser Ile Ser Ser Gly Pro Ile Gln
            20   25   30
Lys Pro Gly Ile Phe Ile Ser His Val Lys Pro Gly Ser Leu Ser Ala
        35   40   45
Glu Val Gly Leu Glu Ile Gly Asp Gln Ile Val Glu Val Asn Gly Val
    50   55   60
Asp Phe Ser Asn Leu Asp His Lys Glu Ala Val Asn Val Leu Lys Ser
65   70   75   80
Ser Arg Ser Leu Thr Ile Ser Ile Val Ala Ala Ala Gly Arg Glu Leu

85 90 95
Phe Met Thr Asp Glu Phe
100

<210> 166
<211> 103
<212> PRT
<213> Homo sapiens

<400> 166
Pro Glu Gln Ile Met Gly Lys Asp Val Arg Leu Leu Arg Ile Lys Lys
1 5 10 15
Glu Gly Ser Leu Asp Leu Ala Leu Glu Gly Gly Val Asp Ser Pro Ile
20 25 30
Gly Lys Val Val Val Ser Ala Val Tyr Glu Arg Gly Ala Ala Glu Arg
35 40 45
His Gly Gly Ile Val Lys Gly Asp Glu Ile Met Ala Ile Asn Gly Lys
50 55 60
Ile Val Thr Asp Tyr Thr Leu Ala Glu Ala Asp Ala Ala Leu Gln Lys
65 70 75 80
Ala Trp Asn Gln Gly Gly Asp Trp Ile Asp Leu Val Val Ala Val Cys
85 90 95
Pro Pro Lys Glu Tyr Asp Asp
100

<210> 167
<211> 103
<212> PRT
<213> Homo sapiens

<400> 167
Leu Thr Ser Thr Phe Asn Pro Arg Glu Cys Lys Leu Ser Lys Gln Glu
1 5 10 15
Gly Gln Asn Tyr Gly Phe Phe Leu Arg Ile Glu Lys Asp Thr Glu Gly
20 25 30
His Leu Val Arg Val Val Glu Lys Cys Ser Pro Ala Glu Lys Ala Gly
35 40 45
Leu Gln Asp Gly Asp Arg Val Leu Arg Ile Asn Gly Val Phe Val Asp
50 55 60
Lys Glu Glu His Met Gln Val Val Asp Leu Val Arg Lys Ser Gly Asn
65 70 75 80
Ser Val Thr Leu Leu Val Leu Asp Gly Asp Ser Tyr Glu Lys Ala Gly
85 90 95
Ser Pro Gly Ile His Arg Asp
100

<210> 168
<211> 92
<212> PRT
<213> Homo sapiens

<400> 168
Arg Leu Cys Tyr Leu Val Lys Glu Gly Gly Ser Tyr Gly Phe Ser Leu
1 5 10 15
Lys Thr Val Gln Gly Lys Lys Gly Val Tyr Met Thr Asp Ile Thr Pro
20 25 30
Gln Gly Val Ala Met Arg Ala Gly Val Leu Ala Asp Asp His Leu Ile

```
        35                  40                  45
Glu Val Asn Gly Glu Asn Val Glu Asp Ala Ser His Glu Glu Val Val
    50                  55                  60
Glu Lys Val Lys Lys Ser Gly Ser Arg Val Met Phe Leu Leu Val Asp
65                  70                  75                  80
Lys Glu Thr Asp Lys Arg Glu Phe Ile Val Thr Asp
                85                  90
```

<210> 169
<211> 112
<212> PRT
<213> Homo sapiens

<400> 169

```
Gln Phe Lys Arg Glu Thr Ala Ser Leu Lys Leu Leu Pro His Gln Pro
 1               5                  10                  15
Arg Ile Val Glu Met Lys Lys Gly Ser Asn Gly Tyr Gly Phe Tyr Leu
            20                  25                  30
Arg Ala Gly Ser Glu Gln Lys Gly Gln Ile Ile Lys Asp Ile Asp Ser
        35                  40                  45
Gly Ser Pro Ala Glu Glu Ala Gly Leu Lys Asn Asn Asp Leu Val Val
    50                  55                  60
Ala Val Asn Gly Glu Ser Val Glu Thr Leu Asp His Asp Ser Val Val
65                  70                  75                  80
Glu Met Ile Arg Lys Gly Gly Asp Gln Thr Ser Leu Leu Val Val Asp
                85                  90                  95
Lys Glu Thr Asp Asn Met Tyr Arg Leu Ala Glu Phe Ile Val Thr Asp
            100                 105                 110
```

<210> 170
<211> 95
<212> PRT
<213> Homo sapiens

<400> 170

```
Pro Asp Thr Thr Glu Glu Val Asp His Lys Pro Lys Leu Cys Arg Leu
 1               5                  10                  15
Ala Lys Gly Glu Asn Gly Tyr Gly Phe His Leu Asn Ala Ile Arg Gly
            20                  25                  30
Leu Pro Gly Ser Phe Ile Lys Glu Val Gln Lys Gly Gly Pro Ala Asp
        35                  40                  45
Leu Ala Gly Leu Glu Asp Glu Asp Val Ile Ile Glu Val Asn Gly Val
    50                  55                  60
Asn Val Leu Asp Glu Pro Tyr Glu Lys Val Val Asp Arg Ile Gln Ser
65                  70                  75                  80
Ser Gly Lys Asn Val Thr Leu Leu Val Glx Gly Lys Asn Ser Ser
                85                  90                  95
```

<210> 171
<211> 89
<212> PRT
<213> Homo sapiens

<400> 171

```
Pro Thr Val Pro Gly Lys Val Thr Leu Gln Lys Asp Ala Gln Asn Leu
 1               5                  10                  15
Ile Gly Ile Ser Ile Gly Gly Gly Ala Gln Tyr Cys Pro Cys Leu Tyr
```

```
            20                  25                  30
Ile Val Gln Val Phe Asp Asn Thr Pro Ala Ala Leu Asp Gly Thr Val
        35                  40                  45
Ala Ala Gly Asp Glu Ile Thr Gly Val Asn Gly Arg Ser Ile Lys Gly
    50                  55                  60
Lys Thr Lys Val Glu Val Ala Lys Met Ile Gln Glu Val Lys Gly Glu
65                  70                  75                  80
Val Thr Ile His Tyr Asn Lys Leu Gln
                85
```

<210> 172
<211> 98
<212> PRT
<213> Homo sapiens

<400> 172

```
Ser Gln Gly Val Gly Pro Ile Arg Lys Val Leu Leu Leu Lys Glu Asp
 1               5                  10                  15
His Glu Gly Leu Gly Ile Ser Ile Thr Gly Gly Lys Glu His Gly Val
            20                  25                  30
Pro Ile Leu Ile Ser Glu Ile His Pro Gly Gln Pro Ala Asp Arg Cys
        35                  40                  45
Gly Gly Leu His Val Gly Asp Ala Ile Leu Ala Val Asn Gly Val Asn
    50                  55                  60
Leu Arg Asp Thr Lys His Lys Glu Ala Val Thr Ile Leu Ser Gln Gln
65                  70                  75                  80
Arg Gly Glu Ile Glu Phe Glu Val Val Tyr Val Ala Pro Glu Val Asp
                85                  90                  95
Ser Asp
```

<210> 173
<211> 97
<212> PRT
<213> Homo sapiens

<400> 173

```
Ile His Val Thr Ile Leu His Lys Glu Glu Gly Ala Gly Leu Gly Phe
 1               5                  10                  15
Ser Leu Ala Gly Gly Ala Asp Leu Glu Asn Lys Val Ile Thr Val His
            20                  25                  30
Arg Val Phe Pro Asn Gly Leu Ala Ser Gln Glu Gly Thr Ile Gln Lys
        35                  40                  45
Gly Asn Glu Val Leu Ser Ile Asn Gly Lys Ser Leu Lys Gly Thr Thr
    50                  55                  60
His His Asp Ala Leu Ala Ile Leu Arg Gln Ala Arg Glu Pro Arg Gln
65                  70                  75                  80
Ala Val Ile Val Thr Arg Lys Leu Thr Pro Glu Glu Phe Ile Val Thr
                85                  90                  95
Asp
```

<210> 174
<211> 98
<212> PRT
<213> Homo sapiens

<400> 174
Thr Ala Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser Ala
 1   5   10   15
Gly Leu Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly Asp
            20   25   30
Lys Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu Gln
        35   40   45
Ser Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly Thr
    50   55   60
Ala Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys Ala
65   70   75   80
Leu Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu Gln
                85   90   95
Ser Lys

<210> 175
<211> 98
<212> PRT
<213> Homo sapiens

<400> 175
Leu Glu Tyr Glu Ile Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe
 1   5   10   15
Ser Ile Ala Gly Gly Thr Asp Asn Pro His Ile Gly Asp Asp Pro Ser
            20   25   30
Ile Phe Ile Thr Lys Ile Ile Pro Gly Gly Ala Ala Ala Gln Asp Gly
        35   40   45
Arg Leu Arg Val Asn Asp Ser Ile Leu Phe Val Asn Glu Val Asp Val
    50   55   60
Arg Glu Val Thr His Ser Ala Ala Val Glu Ala Leu Lys Glu Ala Gly
65   70   75   80
Ser Ile Val Arg Leu Tyr Val Met Arg Arg Lys Pro Pro Ala Glu Asn
                85   90   95
Ser Ser

<210> 176
<211> 105
<212> PRT
<213> Homo sapiens

<400> 176
His Val Met Arg Arg Lys Pro Pro Ala Glu Lys Val Met Glu Ile Lys
 1   5   10   15
Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Val
            20   25   30
Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr Lys Ile
        35   40   45
Ile Glu Gly Gly Ala Ala His Lys Asp Gly Arg Leu Gln Ile Gly Asp
    50   55   60
Lys Ile Leu Ala Val Asn Ser Val Gly Leu Glu Asp Val Met His Glu
65   70   75   80
Asp Ala Val Ala Ala Leu Lys Asn Thr Tyr Asp Val Val Tyr Leu Lys
                85   90   95
Val Ala Lys Pro Ser Asn Ala Tyr Leu
            100   105

<210> 177
<211> 97
<212> PRT
<213> Homo sapiens

<400> 177
Arg Glu Asp Ile Pro Arg Glu Pro Arg Arg Ile Val Ile His Arg Gly
 1   5   10   15
Ser Thr Gly Leu Gly Phe Asn Ile Val Gly Gly Glu Asp Gly Glu Gly
            20   25   30
Ile Phe Ile Ser Phe Ile Leu Ala Gly Gly Pro Ala Asp Leu Ser Gly
        35   40   45
Glu Leu Arg Lys Gly Asp Gln Ile Leu Ser Val Asn Gly Val Asp Leu
    50   55   60
Arg Asn Ala Ser His Glu Gln Ala Ala Ile Ala Leu Lys Asn Ala Gly
65   70   75   80
Gln Thr Val Thr Ile Ile Ala Gln Tyr Lys Pro Glu Phe Ile Val Thr
                85   90   95
Asp

<210> 178
<211> 88
<212> PRT
<213> Homo sapiens

<400> 178
Leu Ile Arg Ile Thr Pro Asp Glu Asp Gly Lys Phe Gly Phe Asn Leu
 1   5   10   15
Lys Gly Gly Val Asp Gln Lys Met Pro Leu Val Val Ser Arg Ile Asn
            20   25   30
Pro Glu Ser Pro Ala Asp Thr Cys Ile Pro Lys Leu Asn Glu Gly Asp
        35   40   45
Gln Ile Val Leu Ile Asn Gly Arg Asp Ile Ser Glu His Thr His Asp
    50   55   60
Gln Val Val Met Phe Ile Lys Ala Ser Arg Glu Ser His Ser Arg Glu
65   70   75   80
Leu Ala Leu Val Ile Arg Arg Arg
                85

<210> 179
<211> 88
<212> PRT
<213> Homo sapiens

<400> 179
Ile Arg Met Lys Pro Asp Glu Asn Gly Arg Phe Gly Phe Asn Val Lys
 1   5   10   15
Gly Gly Tyr Asp Gln Lys Met Pro Val Ile Val Ser Arg Val Ala Pro
            20   25   30
Gly Thr Pro Ala Asp Leu Cys Val Pro Arg Leu Asn Glu Gly Asp Gln
        35   40   45
Val Val Leu Ile Asn Gly Arg Asp Ile Ala Glu His Thr His Asp Gln
    50   55   60
Val Val Leu Phe Ile Lys Ala Ser Cys Glu Arg His Ser Gly Glu Leu
65   70   75   80
Met Leu Leu Val Arg Pro Asn Ala

<210> 180
<211> 106
<212> PRT
<213> Homo sapiens

<400> 180
Pro Glu Arg Glu Ile Thr Leu Val Asn Leu Lys Lys Asp Ala Lys Tyr
 1   5   10   15
Gly Leu Gly Phe Gln Ile Ile Gly Gly Glu Lys Met Gly Arg Leu Asp
            20   25   30
Leu Gly Ile Phe Ile Ser Ser Val Ala Pro Gly Gly Pro Ala Asp Phe
        35   40   45
His Gly Cys Leu Lys Pro Gly Asp Arg Leu Ile Ser Val Asn Ser Val
    50   55   60
Ser Leu Glu Gly Val Ser His His Ala Ala Ile Glu Ile Leu Gln Asn
65   70   75   80
Ala Pro Glu Asp Val Thr Leu Val Ile Ser Gln Pro Lys Glu Lys Ile
                85   90   95
Ser Lys Val Pro Ser Thr Pro Val His Leu
            100   105

<210> 181
<211> 95
<212> PRT
<213> Homo sapiens

<400> 181
Gly Asp Ile Phe Glu Val Glu Leu Ala Lys Asn Asp Asn Ser Leu Gly
 1   5   10   15
Ile Ser Val Thr Gly Gly Val Asn Thr Ser Val Arg His Gly Gly Ile
            20   25   30
Tyr Val Lys Ala Val Ile Pro Gln Gly Ala Ala Glu Ser Asp Gly Arg
        35   40   45
Ile His Lys Gly Asp Arg Val Leu Ala Val Asn Gly Val Ser Leu Glu
    50   55   60
Gly Ala Thr His Lys Gln Ala Val Glu Thr Leu Arg Asn Thr Gly Gln
65   70   75   80
Val Val His Leu Leu Leu Glu Lys Gly Gln Ser Pro Thr Ser Lys
                85   90   95

<210> 182
<211> 104
<212> PRT
<213> Homo sapiens

<400> 182
Thr Glu Glu Asn Thr Phe Glu Val Lys Leu Phe Lys Asn Ser Ser Gly
 1   5   10   15
Leu Gly Phe Ser Phe Ser Arg Glu Asp Asn Leu Ile Pro Glu Gln Ile
            20   25   30
Asn Ala Ser Ile Val Arg Val Lys Lys Leu Phe Ala Gly Gln Pro Ala
        35   40   45
Ala Glu Ser Gly Lys Ile Asp Val Gly Asp Val Ile Leu Lys Val Asn
    50   55   60
Gly Ala Ser Leu Lys Gly Leu Ser Gln Gln Glu Val Ile Ser Ala Leu

65 70 75 80
Arg Gly Thr Ala Pro Glu Val Phe Leu Leu Cys Arg Pro Pro Pro
85 90 95
Gly Val Leu Pro Glu Ile Asp Thr
100

<210> 183
<211> 98
<212> PRT
<213> Homo sapiens

<400> 183
Glu Leu Glu Val Glu Leu Leu Ile Thr Leu Ile Lys Ser Glu Lys Ala
1 5 10 15
Ser Leu Gly Phe Thr Val Thr Lys Gly Asn Gln Arg Ile Gly Cys Tyr
20 25 30
Val His Asp Val Ile Gln Asp Pro Ala Lys Ser Asp Gly Arg Leu Lys
35 40 45
Pro Gly Asp Arg Leu Ile Lys Val Asn Asp Thr Asp Val Thr Asn Met
50 55 60
Thr His Thr Asp Ala Val Asn Leu Leu Arg Ala Ala Ser Lys Thr Val
65 70 75 80
Arg Leu Val Ile Gly Arg Val Leu Glu Leu Pro Arg Ile Pro Met Leu
85 90 95
Pro His

<210> 184
<211> 94
<212> PRT
<213> Homo sapiens

<400> 184
Met Leu Pro His Leu Leu Pro Asp Ile Thr Leu Thr Cys Asn Lys Glu
1 5 10 15
Glu Leu Gly Phe Ser Leu Cys Gly Gly His Asp Ser Leu Tyr Gln Val
20 25 30
Val Tyr Ile Ser Asp Ile Asn Pro Arg Ser Val Ala Ala Ile Glu Gly
35 40 45
Asn Leu Gln Leu Leu Asp Val Ile His Tyr Val Asn Gly Val Ser Thr
50 55 60
Gln Gly Met Thr Leu Glu Glu Val Asn Arg Ala Leu Asp Met Ser Leu
65 70 75 80
Pro Ser Leu Val Leu Lys Ala Thr Arg Asn Asp Leu Pro Val
85 90

<210> 185
<211> 93
<212> PRT
<213> Homo sapiens

<400> 185
Arg Pro Ser Pro Pro Arg Val Arg Ser Val Glu Val Ala Arg Gly Arg
1 5 10 15
Ala Gly Tyr Gly Phe Thr Leu Ser Gly Gln Ala Pro Cys Val Leu Ser
20 25 30
Cys Val Met Arg Gly Ser Pro Ala Asp Phe Val Gly Leu Arg Ala Gly

```
        35                  40                  45
Asp Gln Ile Leu Ala Val Asn Glu Ile Asn Val Lys Lys Ala Ser His
    50                  55                  60
Glu Asp Val Val Lys Leu Ile Gly Lys Cys Ser Gly Val Leu His Met
65                  70                  75                  80
Val Ile Ala Glu Gly Val Gly Arg Phe Glu Ser Cys Ser
                85                  90
```

<210> 186
<211> 96
<212> PRT
<213> Homo sapiens

<400> 186

```
Leu Cys Ser Glu Arg Arg Tyr Arg Gln Ile Thr Ile Pro Arg Gly Lys
 1               5                  10                  15
Asp Gly Phe Gly Phe Thr Ile Cys Cys Asp Ser Pro Val Arg Val Gln
            20                  25                  30
Ala Val Asp Ser Gly Gly Pro Ala Glu Arg Ala Gly Leu Gln Gln Leu
        35                  40                  45
Asp Thr Val Leu Gln Leu Asn Glu Arg Pro Val Glu His Trp Lys Cys
    50                  55                  60
Val Glu Leu Ala His Glu Ile Arg Ser Cys Pro Ser Glu Ile Ile Leu
65                  70                  75                  80
Leu Val Trp Arg Met Val Pro Gln Val Lys Pro Gly Ile His Arg Asp
                85                  90                  95
```

<210> 187
<211> 104
<212> PRT
<213> Homo sapiens

<400> 187

```
Ile Ser Phe Ser Ala Asn Lys Arg Trp Thr Pro Pro Arg Ser Ile Arg
 1               5                  10                  15
Phe Thr Ala Glu Glu Gly Asp Leu Gly Phe Thr Leu Arg Gly Asn Ala
            20                  25                  30
Pro Val Gln Val His Phe Leu Asp Pro Tyr Cys Ser Ala Ser Val Ala
        35                  40                  45
Gly Ala Arg Glu Gly Asp Tyr Ile Val Ser Ile Gln Leu Val Asp Cys
    50                  55                  60
Lys Trp Leu Thr Leu Ser Glu Val Met Lys Leu Leu Lys Ser Phe Gly
65                  70                  75                  80
Glu Asp Glu Ile Glu Met Lys Val Val Ser Leu Leu Asp Ser Thr Ser
                85                  90                  95
Ser Met His Asn Lys Ser Ala Thr
            100
```

<210> 188
<211> 109
<212> PRT
<213> Homo sapiens

<400> 188

```
Arg Gly Glu Lys Lys Asn Ser Ser Ser Gly Ile Ser Gly Ser Gln Arg
 1               5                  10                  15
Arg Tyr Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile Leu Ala
```

```
            20                  25                  30
Glu Leu Gln Leu Arg Glu Pro Ser Phe Pro Asp Val Gln His Gly Val
        35                  40                  45
Leu Ile His Lys Val Ile Leu Gly Ser Pro Ala His Arg Ala Gly Leu
    50                  55                  60
Arg Pro Gly Asp Val Ile Leu Ala Ile Gly Glu Gln Met Val Gln Asn
65                  70                  75                  80
Ala Glu Asp Val Tyr Glu Ala Val Arg Thr Gln Ser Gln Leu Ala Val
                85                  90                  95
Gln Ile Arg Arg Gly Arg Glu Thr Leu Thr Leu Tyr Val
            100                 105
```

<210> 189
<211> 111
<212> PRT
<213> Homo sapiens

<400> 189

```
Glu Glu Lys Thr Val Val Leu Gln Lys Lys Asp Asn Glu Gly Phe Gly
 1                  5                  10                  15
Phe Val Leu Arg Gly Ala Lys Ala Asp Thr Pro Ile Glu Glu Phe Thr
            20                  25                  30
Pro Thr Pro Ala Phe Pro Ala Leu Gln Tyr Leu Glu Ser Val Asp Glu
        35                  40                  45
Gly Gly Val Ala Trp Gln Ala Gly Leu Arg Thr Gly Asp Phe Leu Ile
    50                  55                  60
Glu Val Asn Asn Glu Asn Val Val Lys Val Gly His Arg Gln Val Val
65                  70                  75                  80
Asn Met Ile Arg Gln Gly Gly Asn His Leu Val Leu Lys Val Val Thr
                85                  90                  95
Val Thr Arg Asn Leu Asp Pro Asp Asp Thr Ala Arg Lys Lys Ala
            100                 105                 110
```

<210> 190
<211> 110
<212> PRT
<213> Homo sapiens

<400> 190

```
Ser Asp Tyr Val Ile Asp Asp Lys Val Ala Val Leu Gln Lys Arg Asp
 1                  5                  10                  15
His Glu Gly Phe Gly Phe Val Leu Arg Gly Ala Lys Ala Glu Thr Pro
            20                  25                  30
Ile Glu Glu Phe Thr Pro Thr Pro Ala Phe Pro Ala Leu Gln Tyr Leu
        35                  40                  45
Glu Ser Val Asp Val Glu Gly Val Ala Trp Arg Ala Gly Leu Arg Thr
    50                  55                  60
Gly Asp Phe Leu Ile Glu Val Asn Gly Val Asn Val Val Lys Val Gly
65                  70                  75                  80
His Lys Gln Val Val Ala Leu Ile Arg Gln Gly Gly Asn Arg Leu Val
                85                  90                  95
Met Lys Val Val Ser Val Thr Arg Lys Pro Glu Glu Asp Gly
            100                 105                 110
```

<210> 191
<211> 91
<212> PRT

<213> Homo sapiens

<400> 191
Ile Tyr Leu Glu Ala Phe Leu Glu Gly Gly Ala Pro Trp Gly Phe Thr
 1   5   10   15
Leu Lys Gly Gly Leu Glu His Gly Glu Pro Leu Ile Ile Ser Lys Val
            20   25   30
Glu Glu Gly Gly Lys Ala Asp Thr Leu Ser Ser Lys Leu Gln Ala Gly
        35   40   45
Asp Glu Val Val His Ile Asn Glu Val Thr Leu Ser Ser Ser Arg Lys
    50   55   60
Glu Ala Val Ser Leu Val Lys Gly Ser Tyr Lys Thr Leu Arg Leu Val
65   70   75   80
Val Arg Arg Asp Val Cys Thr Asp Pro Gly His
                85   90

<210> 192
<211> 83
<212> PRT
<213> Homo sapiens

<400> 192
Ile Arg Leu Cys Arg Leu Val Arg Gly Glu Gln Gly Tyr Gly Phe His
 1   5   10   15
Leu His Gly Glu Lys Gly Arg Arg Gly Gln Phe Ile Arg Arg Val Glu
            20   25   30
Pro Gly Ser Pro Ala Glu Ala Ala Ala Leu Arg Ala Gly Asp Arg Leu
        35   40   45
Val Glu Val Asn Gly Val Asn Val Glu Gly Glu Thr His His Gln Val
    50   55   60
Val Gln Arg Ile Lys Ala Val Glu Gly Gln Thr Arg Leu Leu Val Val
65   70   75   80
Asp Gln Asn

<210> 193
<211> 84
<212> PRT
<213> Homo sapiens

<400> 193
Ile Arg His Leu Arg Lys Gly Pro Gln Gly Tyr Gly Phe Asn Leu His
 1   5   10   15
Ser Asp Lys Ser Arg Pro Gly Gln Tyr Ile Arg Ser Val Asp Pro Gly
            20   25   30
Ser Pro Ala Ala Arg Ser Gly Leu Arg Ala Gln Asp Arg Leu Ile Glu
        35   40   45
Val Asn Gly Gln Asn Val Glu Gly Leu Arg His Ala Glu Val Val Ala
    50   55   60
Ser Ile Lys Ala Arg Glu Asp Glu Ala Arg Leu Leu Val Val Asp Pro
65   70   75   80
Glu Thr Asp Glu

<210> 194
<211> 92
<212> PRT

<213> Homo sapiens

<400> 194
Pro Gly Val Arg Glu Ile His Leu Cys Lys Asp Glu Arg Gly Lys Thr
 1   5   10   15
Gly Leu Arg Leu Arg Lys Val Asp Gln Gly Leu Phe Val Gln Leu Val
            20   25   30
Gln Ala Asn Thr Pro Ala Ser Leu Val Gly Leu Arg Phe Gly Asp Gln
        35   40   45
Leu Leu Gln Ile Asp Gly Arg Asp Cys Ala Gly Trp Ser Ser His Lys
    50   55   60
Ala His Gln Val Val Lys Lys Ala Ser Gly Asp Lys Ile Val Val Val
65   70   75   80
Val Arg Asp Arg Pro Phe Gln Arg Thr Val Thr Met
                85   90

<210> 195
<211> 90
<212> PRT
<213> Homo sapiens

<400> 195
Pro Phe Gln Arg Thr Val Thr Met His Lys Asp Ser Met Gly His Val
 1   5   10   15
Gly Phe Val Ile Lys Lys Gly Lys Ile Val Ser Leu Val Lys Gly Ser
            20   25   30
Ser Ala Ala Arg Asn Gly Leu Leu Thr Asn His Tyr Val Cys Glu Val
        35   40   45
Asp Gly Gln Asn Val Ile Gly Leu Lys Asp Lys Lys Ile Met Glu Ile
    50   55   60
Leu Ala Thr Ala Gly Asn Val Val Thr Leu Thr Ile Ile Pro Ser Val
65   70   75   80
Ile Tyr Glu His Ile Val Glu Phe Ile Val
                85   90

<210> 196
<211> 109
<212> PRT
<213> Homo sapiens

<400> 196
Leu Lys Glu Lys Thr Val Leu Leu Gln Lys Lys Asp Ser Glu Gly Phe
 1   5   10   15
Gly Phe Val Leu Arg Gly Ala Lys Ala Gln Thr Pro Ile Glu Glu Phe
            20   25   30
Thr Pro Thr Pro Ala Phe Pro Ala Leu Gln Tyr Leu Glu Ser Val Asp
        35   40   45
Glu Gly Gly Val Ala Trp Arg Ala Gly Leu Arg Met Gly Asp Phe Leu
    50   55   60
Ile Glu Val Asn Gly Gln Asn Val Val Lys Val Gly His Arg Gln Val
65   70   75   80
Val Asn Met Ile Arg Gln Gly Gly Asn Thr Leu Met Val Lys Val Val
                85   90   95
Met Val Thr Arg His Pro Asp Met Asp Glu Ala Val Gln
            100   105

<210> 197

<211> 88
<212> PRT
<213> Homo sapiens

<400> 197
Leu Glu Ile Lys Gln Gly Ile Arg Glu Val Ile Leu Cys Lys Asp Gln
 1   5   10   15
Asp Gly Lys Ile Gly Leu Arg Leu Lys Ser Ile Asp Asn Gly Ile Phe
            20   25   30
Val Gln Leu Val Gln Ala Asn Ser Pro Ala Ser Leu Val Gly Leu Arg
        35   40   45
Phe Gly Asp Gln Val Leu Gln Ile Asn Gly Glu Asn Cys Ala Gly Trp
    50   55   60
Ser Ser Asp Lys Ala His Lys Val Leu Lys Gln Ala Phe Gly Glu Lys
65   70   75   80
Ile Thr Met Arg Ile His Arg Asp
                85

<210> 198
<211> 75
<212> PRT
<213> Homo sapiens

<400> 198
Arg Asp Arg Pro Phe Glu Arg Thr Ile Thr Met His Lys Asp Ser Thr
 1   5   10   15
Gly His Val Gly Phe Ile Phe Lys Asn Gly Lys Ile Thr Ser Ile Val
            20   25   30
Lys Asp Ser Ser Ala Ala Arg Asn Gly Leu Leu Thr Glu His Asn Ile
        35   40   45
Cys Glu Ile Asn Gly Gln Asn Val Ile Gly Leu Lys Asp Ser Gln Ile
    50   55   60
Ala Asp Ile Leu Ser Thr Ser Gly Asn Ser Ser
65   70   75

<210> 199
<211> 94
<212> PRT
<213> Homo sapiens

<400> 199
Gln Arg Arg Arg Val Thr Val Arg Lys Ala Asp Ala Gly Gly Leu Gly
 1   5   10   15
Ile Ser Ile Lys Gly Gly Arg Glu Asn Lys Met Pro Ile Leu Ile Ser
            20   25   30
Lys Ile Phe Lys Gly Leu Ala Ala Asp Gln Thr Glu Ala Leu Phe Val
        35   40   45
Gly Asp Ala Ile Leu Ser Val Asn Gly Glu Asp Leu Ser Ser Ala Thr
    50   55   60
His Asp Glu Ala Val Gln Val Leu Lys Lys Thr Gly Lys Glu Val Val
65   70   75   80
Leu Glu Val Lys Tyr Met Lys Asp Val Ser Pro Tyr Phe Lys
                85   90

<210> 200
<211> 89
<212> PRT

<213> Homo sapiens

<400> 200
Ile Arg Val Val Lys Gln Glu Ala Gly Gly Leu Gly Ile Ser Ile Lys
 1   5   10   15
Gly Gly Arg Glu Asn Arg Met Pro Ile Leu Ile Ser Lys Ile Phe Pro
            20   25   30
Gly Leu Ala Ala Asp Gln Ser Arg Ala Leu Arg Leu Gly Asp Ala Ile
        35   40   45
Leu Ser Val Asn Gly Thr Asp Leu Arg Gln Ala Thr His Asp Gln Ala
    50   55   60
Val Gln Ala Leu Lys Arg Ala Gly Lys Glu Val Leu Leu Glu Val Lys
65   70   75   80
Phe Ile Arg Glu Phe Ile Val Thr Asp
                85

<210> 201
<211> 101
<212> PRT
<213> Homo sapiens

<400> 201
Glu Pro Phe Tyr Ser Gly Glu Arg Thr Val Thr Ile Arg Arg Gln Thr
 1   5   10   15
Val Gly Gly Phe Gly Leu Ser Ile Lys Gly Gly Ala Glu His Asn Ile
            20   25   30
Pro Val Val Val Ser Lys Ile Ser Lys Glu Gln Arg Ala Glu Leu Ser
        35   40   45
Gly Leu Leu Phe Ile Gly Asp Ala Ile Leu Gln Ile Asn Gly Ile Asn
    50   55   60
Val Arg Lys Cys Arg His Glu Glu Val Val Gln Val Leu Arg Asn Ala
65   70   75   80
Gly Glu Glu Val Thr Leu Thr Val Ser Phe Leu Lys Arg Ala Pro Ala
                85   90   95
Phe Leu Lys Leu Pro
            100

<210> 202
<211> 99
<212> PRT
<213> Homo sapiens

<400> 202
Ser His Gln Gly Arg Asn Arg Arg Thr Val Thr Leu Arg Arg Gln Pro
 1   5   10   15
Val Gly Gly Leu Gly Leu Ser Ile Lys Gly Gly Ser Glu His Asn Val
            20   25   30
Pro Val Val Ile Ser Lys Ile Phe Glu Asp Gln Ala Ala Asp Gln Thr
        35   40   45
Gly Met Leu Phe Val Gly Asp Ala Val Leu Gln Val Asn Gly Ile His
    50   55   60
Val Glu Asn Ala Thr His Glu Glu Val Val His Leu Leu Arg Asn Ala
65   70   75   80
Gly Asp Glu Val Thr Ile Thr Val Glu Tyr Leu Arg Glu Ala Pro Ala
                85   90   95
Phe Leu Lys

<210> 203
<211> 91
<212> PRT
<213> Homo sapiens

<400> 203
Arg Gly Glu Thr Lys Glu Val Glu Val Thr Lys Thr Glu Asp Ala Leu
 1   5   10   15
Gly Leu Thr Ile Thr Asp Asn Gly Ala Gly Tyr Ala Phe Ile Lys Arg
            20   25   30
Ile Lys Glu Gly Ser Ile Ile Asn Arg Ile Glu Ala Val Cys Val Gly
        35   40   45
Asp Ser Ile Glu Ala Ile Asn Asp His Ser Ile Val Gly Cys Arg His
    50   55   60
Tyr Glu Val Ala Lys Met Leu Arg Glu Leu Pro Lys Ser Gln Pro Phe
65   70   75   80
Thr Leu Arg Leu Val Gln Pro Lys Arg Ala Phe
                85   90

<210> 204
<211> 88
<212> PRT
<213> Homo sapiens

<400> 204
His Ser Ile His Ile Glu Lys Ser Asp Thr Ala Ala Asp Thr Tyr Gly
 1   5   10   15
Phe Ser Leu Ser Ser Val Glu Glu Asp Gly Ile Arg Arg Leu Tyr Val
            20   25   30
Asn Ser Val Lys Glu Thr Gly Leu Ala Ser Lys Lys Gly Leu Lys Ala
        35   40   45
Gly Asp Glu Ile Leu Glu Ile Asn Asn Arg Ala Ala Asp Ala Leu Asn
    50   55   60
Ser Ser Met Leu Lys Asp Phe Leu Ser Gln Pro Ser Leu Gly Leu Leu
65   70   75   80
Val Arg Thr Tyr Pro Glu Leu Glu
                85

<210> 205
<211> 97
<212> PRT
<213> Homo sapiens

<400> 205
Pro Leu Asn Val Tyr Asp Val Gln Leu Thr Lys Thr Gly Ser Val Cys
 1   5   10   15
Asp Phe Gly Phe Ala Val Thr Ala Gln Val Asp Glu Arg Gln His Leu
            20   25   30
Ser Arg Ile Phe Ile Ser Asp Val Leu Pro Asp Gly Leu Ala Tyr Gly
        35   40   45
Glu Gly Leu Arg Lys Gly Asn Glu Ile Met Thr Leu Asn Gly Glu Ala
    50   55   60
Val Ser Asp Leu Asp Leu Lys Gln Met Glu Ala Leu Phe Ser Glu Lys
65   70   75   80
Ser Val Gly Leu Thr Leu Ile Ala Arg Pro Pro Asp Thr Lys Ala Thr
                85   90   95
Leu

<210> 206
<211> 103
<212> PRT
<213> Homo sapiens

<400> 206
Gln Arg Val Glu Ile His Lys Leu Arg Gln Gly Glu Asn Leu Ile Leu
 1   5   10   15
Gly Phe Ser Ile Gly Gly Gly Ile Asp Gln Asp Pro Ser Gln Asn Pro
            20   25   30
Phe Ser Glu Asp Lys Thr Asp Lys Gly Ile Tyr Val Thr Arg Val Ser
        35   40   45
Glu Gly Gly Pro Ala Glu Ile Ala Gly Leu Gln Ile Gly Asp Lys Ile
    50   55   60
Met Gln Val Asn Gly Trp Asp Met Thr Met Val Thr His Asp Gln Ala
65   70   75   80
Arg Lys Arg Leu Thr Lys Arg Ser Glu Glu Val Val Arg Leu Leu Val
                85   90   95
Thr Arg Gln Ser Leu Gln Lys
            100

<210> 207
<211> 86
<212> PRT
<213> Homo sapiens

<400> 207
Arg Lys Glu Val Glu Val Phe Lys Ser Glu Asp Ala Leu Gly Leu Thr
 1   5   10   15
Ile Thr Asp Asn Gly Ala Gly Tyr Ala Phe Ile Lys Arg Ile Lys Glu
            20   25   30
Gly Ser Val Ile Asp His Ile His Leu Ile Ser Val Gly Asp Met Ile
        35   40   45
Glu Ala Ile Asn Gly Gln Ser Leu Leu Gly Cys Arg His Tyr Glu Val
    50   55   60
Ala Arg Leu Leu Lys Glu Leu Pro Arg Gly Arg Thr Phe Thr Leu Lys
65   70   75   80
Leu Thr Glu Pro Arg Lys
                85

<210> 208
<211> 91
<212> PRT
<213> Homo sapiens

<400> 208
His Ser His Pro Arg Val Val Glu Leu Pro Lys Thr Asp Glu Gly Leu
 1   5   10   15
Gly Phe Asn Val Met Gly Gly Lys Glu Gln Asn Ser Pro Ile Tyr Ile
            20   25   30
Ser Arg Ile Ile Pro Gly Gly Val Ala Glu Arg His Gly Gly Leu Lys
        35   40   45
Arg Gly Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu Gly Glu
    50   55   60
His His Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Lys Asp Ser Val

65 70 75 80
Lys Leu Val Val Arg Tyr Thr Pro Lys Val Leu
85 90

<210> 209
<211> 96
<212> PRT
<213> Homo sapiens

<400> 209
Ile Ser Asn Gln Lys Arg Gly Val Lys Val Leu Lys Gln Glu Leu Gly
1 5 10 15
Gly Leu Gly Ile Ser Ile Lys Gly Gly Lys Glu Asn Lys Met Pro Ile
20 25 30
Leu Ile Ser Lys Ile Phe Lys Gly Leu Ala Ala Asp Gln Thr Gln Ala
35 40 45
Leu Tyr Val Gly Asp Ala Ile Leu Ser Val Asn Gly Ala Asp Leu Arg
50 55 60
Asp Ala Thr His Asp Glu Ala Val Gln Ala Leu Lys Arg Ala Gly Lys
65 70 75 80
Glu Val Leu Leu Glu Val Lys Tyr Met Arg Glu Ala Thr Pro Tyr Val
85 90 95

<210> 210
<211> 110
<212> PRT
<213> Homo sapiens

<400> 210
Ile His Phe Ser Asn Ser Glu Asn Cys Lys Glu Leu Gln Leu Glu Lys
1 5 10 15
His Lys Gly Glu Ile Leu Gly Val Val Val Val Glu Ser Gly Trp Gly
20 25 30
Ser Ile Leu Pro Thr Val Ile Leu Ala Asn Met Met Asn Gly Gly Pro
35 40 45
Ala Ala Arg Ser Gly Lys Leu Ser Ile Gly Asp Gln Ile Met Ser Ile
50 55 60
Asn Gly Thr Ser Leu Val Gly Leu Pro Leu Ala Thr Cys Gln Gly Ile
65 70 75 80
Ile Lys Gly Leu Lys Asn Gln Thr Gln Val Lys Leu Asn Ile Val Ser
85 90 95
Cys Pro Pro Val Thr Thr Val Leu Ile Lys Arg Asn Ser Ser
100 105 110

<210> 211
<211> 94
<212> PRT
<213> Homo sapiens

<400> 211
Ile Pro Pro Val Thr Thr Val Leu Ile Lys Arg Pro Asp Leu Lys Tyr
1 5 10 15
Gln Leu Gly Phe Ser Val Gln Asn Gly Ile Ile Cys Ser Leu Met Arg
20 25 30
Gly Gly Ile Ala Glu Arg Gly Gly Val Arg Val Gly His Arg Ile Ile
35 40 45
Glu Ile Asn Gly Gln Ser Val Val Ala Thr Ala His Glu Lys Ile Val

```
    50                  55                  60
Gln Ala Leu Ser Asn Ser Val Gly Glu Ile His Met Lys Thr Met Pro
65                  70                  75                  80
Ala Ala Met Phe Arg Leu Leu Thr Gly Gln Glu Asn Ser Ser
                85                  90
```

<210> 212
<211> 101
<212> PRT
<213> Homo sapiens

<400> 212

```
Ile Trp Glu Gln His Thr Val Thr Leu His Arg Ala Pro Gly Phe Gly
 1               5                  10                  15
Phe Gly Ile Ala Ile Ser Gly Gly Arg Asp Asn Pro His Phe Gln Ser
            20                  25                  30
Gly Glu Thr Ser Ile Val Ile Ser Asp Val Leu Lys Gly Gly Pro Ala
        35                  40                  45
Glu Gly Gln Leu Gln Glu Asn Asp Arg Val Ala Met Val Asn Gly Val
    50                  55                  60
Ser Met Asp Asn Val Glu His Ala Phe Ala Val Gln Gln Leu Arg Lys
65                  70                  75                  80
Ser Gly Lys Asn Ala Lys Ile Thr Ile Arg Arg Lys Lys Lys Val Gln
                85                  90                  95
Ile Pro Asn Ser Ser
            100
```

<210> 213
<211> 95
<212> PRT
<213> Homo sapiens

<400> 213

```
Ile Ser Ser Gln Pro Ala Lys Pro Thr Lys Val Thr Leu Val Lys Ser
 1               5                  10                  15
Arg Lys Asn Glu Glu Tyr Gly Leu Arg Leu Ala Ser His Ile Phe Val
            20                  25                  30
Lys Glu Ile Ser Gln Asp Ser Leu Ala Ala Arg Asp Gly Asn Ile Gln
        35                  40                  45
Glu Gly Asp Val Val Leu Lys Ile Asn Gly Thr Val Thr Glu Asn Met
    50                  55                  60
Ser Leu Thr Asp Ala Lys Thr Leu Ile Glu Arg Ser Lys Gly Lys Leu
65                  70                  75                  80
Lys Met Val Val Gln Arg Asp Arg Ala Thr Leu Leu Asn Ser Ser
                85                  90                  95
```

<210> 214
<211> 90
<212> PRT
<213> Homo sapiens

<400> 214

```
Ile Arg Met Lys Leu Val Lys Phe Arg Lys Gly Asp Ser Val Gly Leu
 1               5                  10                  15
Arg Leu Ala Gly Gly Asn Asp Val Gly Ile Phe Val Ala Gly Val Leu
            20                  25                  30
Glu Asp Ser Pro Ala Ala Lys Glu Gly Leu Glu Glu Gly Asp Gln Ile
```

```
        35                  40                  45
Leu Arg Val Asn Asn Val Asp Phe Thr Asn Ile Ile Arg Glu Glu Ala
    50                  55                  60
Val Leu Phe Leu Leu Asp Leu Pro Lys Gly Glu Glu Val Thr Ile Leu
65                  70                  75                  80
Ala Gln Lys Lys Lys Asp Val Phe Ser Asn
                85                  90
```

<210> 215
<211> 96
<212> PRT
<213> Homo sapiens

<400> 215

```
Leu Ile Trp Glu Gln Tyr Thr Val Thr Leu Gln Lys Asp Ser Lys Arg
 1               5                  10                  15
Gly Phe Gly Ile Ala Val Ser Gly Gly Arg Asp Asn Pro His Phe Glu
            20                  25                  30
Asn Gly Glu Thr Ser Ile Val Ile Ser Asp Val Leu Pro Gly Gly Pro
        35                  40                  45
Ala Asp Gly Leu Leu Gln Glu Asn Asp Arg Val Val Met Val Asn Gly
    50                  55                  60
Thr Pro Met Glu Asp Val Leu His Ser Phe Ala Val Gln Gln Leu Arg
65                  70                  75                  80
Lys Ser Gly Lys Val Ala Ala Ile Val Val Lys Arg Pro Arg Lys Val
                85                  90                  95
```

<210> 216
<211> 79
<212> PRT
<213> Homo sapiens

<400> 216

```
Arg Val Leu Leu Met Lys Ser Arg Ala Asn Glu Glu Tyr Gly Leu Arg
 1               5                  10                  15
Leu Gly Ser Gln Ile Phe Val Lys Glu Met Thr Arg Thr Gly Leu Ala
            20                  25                  30
Thr Lys Asp Gly Asn Leu His Glu Gly Asp Ile Ile Leu Lys Ile Asn
        35                  40                  45
Gly Thr Val Thr Glu Asn Met Ser Leu Thr Asp Ala Arg Lys Leu Ile
    50                  55                  60
Glu Lys Ser Arg Gly Lys Leu Gln Leu Val Val Leu Arg Asp Ser
65                  70                  75
```

<210> 217
<211> 90
<212> PRT
<213> Homo sapiens

<400> 217

```
His Ala Pro Asn Thr Lys Met Val Arg Phe Lys Lys Gly Asp Ser Val
 1               5                  10                  15
Gly Leu Arg Leu Ala Gly Gly Asn Asp Val Gly Ile Phe Val Ala Gly
            20                  25                  30
Ile Gln Glu Gly Thr Ser Ala Glu Gln Glu Gly Leu Gln Glu Gly Asp
        35                  40                  45
Gln Ile Leu Lys Val Asn Thr Gln Asp Phe Arg Gly Leu Val Arg Glu
```

```
    50                  55                  60
Asp Ala Val Leu Tyr Leu Leu Glu Ile Pro Lys Gly Glu Met Val Thr
65                  70                  75                  80
Ile Leu Ala Gln Ser Arg Ala Asp Val Tyr
                85                  90
```

<210> 218
<211> 106
<212> PRT
<213> Homo sapiens

<400> 218

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Ile Pro Gly Asn Ser Thr Ile Trp Glu Gln His Thr Ala Thr Leu Ser
 1               5                  10                  15
Lys Asp Pro Arg Arg Gly Phe Gly Ile Ala Ile Ser Gly Gly Arg Asp
            20                  25                  30
Arg Pro Gly Gly Ser Met Val Val Ser Asp Val Val Pro Gly Gly Pro
        35                  40                  45
Ala Glu Gly Arg Leu Gln Thr Gly Asp His Ile Val Met Val Asn Gly
    50                  55                  60
Val Ser Met Glu Asn Ala Thr Ser Ala Phe Ala Ile Gln Ile Leu Lys
65                  70                  75                  80
Thr Cys Thr Lys Met Ala Asn Ile Thr Val Lys Arg Pro Arg Arg Ile
                85                  90                  95
His Leu Pro Ala Glu Phe Ile Val Thr Asp
            100                 105
```

<210> 219
<211> 98
<212> PRT
<213> Homo sapiens

<400> 219

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Gln Asp Val Gln Met Lys Pro Val Lys Ser Val Leu Val Lys Arg Arg
 1               5                  10                  15
Asp Ser Glu Glu Phe Gly Val Lys Leu Gly Ser Gln Ile Phe Ile Lys
            20                  25                  30
His Ile Thr Asp Ser Gly Leu Ala Ala Arg His Arg Gly Leu Gln Glu
        35                  40                  45
Gly Asp Leu Ile Leu Gln Ile Asn Gly Val Ser Ser Gln Asn Leu Ser
    50                  55                  60
Leu Asn Asp Thr Arg Arg Leu Ile Glu Lys Ser Glu Gly Lys Leu Ser
65                  70                  75                  80
Leu Leu Val Leu Arg Asp Arg Gly Gln Phe Leu Val Asn Ile Pro Asn
                85                  90                  95
Ser Ser
```

<210> 220
<211> 104
<212> PRT
<213> Homo sapiens

<400> 220

```
Arg Gly Tyr Ser Pro Asp Thr Arg Val Val Arg Phe Leu Lys Gly Lys
 1               5                  10                  15
Ser Ile Gly Leu Arg Leu Ala Gly Gly Asn Asp Val Gly Ile Phe Val
```

```
            20                  25                  30
Ser Gly Val Gln Ala Gly Ser Pro Ala Asp Gly Gln Gly Ile Gln Glu
        35                  40                  45
Gly Asp Gln Ile Leu Gln Val Asn Asp Val Pro Phe Gln Asn Leu Thr
    50                  55                  60
Arg Glu Glu Ala Val Gln Phe Leu Leu Gly Leu Pro Pro Gly Glu Glu
65                  70                  75                  80
Met Glu Leu Val Thr Gln Arg Lys Gln Asp Ile Phe Trp Lys Met Val
                85                  90                  95
Gln Ser Glu Phe Ile Val Thr Asp
            100
```

<210> 221
<211> 10
<212> PRT
<213> Homo sapiens

<400> 221
Gly Tyr Cys Arg Asn Cys Ile Arg Lys Gln
 1   5   10

<210> 222
<211> 10
<212> PRT
<213> Homo sapiens

<400> 222
Trp Thr Thr Cys Met Glu Asp Leu Leu Pro
 1   5   10

<210> 223
<211> 10
<212> PRT
<213> Homo sapiens

<400> 223
Gly Ile Cys Arg Leu Cys Lys His Phe Gln
 1   5   10

<210> 224
<211> 10
<212> PRT
<213> Homo sapiens

<400> 224
Lys Gly Leu Cys Arg Gln Cys Lys Gln Ile
 1   5   10

<210> 225
<211> 10
<212> PRT
<213> Homo sapiens

<400> 225
Trp Leu Arg Cys Thr Val Arg Ile Pro Gln

1 5 10

<210> 226
<211> 10
<212> PRT
<213> Homo sapiens

<400> 226
Arg Gln Cys Lys His Phe Tyr Asn Asp Trp
1 5 10

<210> 227
<211> 10
<212> PRT
<213> Homo sapiens

<400> 227
Cys Arg Asn Cys Ile Ser His Glu Gly Arg
1 5 10

<210> 228
<211> 10
<212> PRT
<213> Homo sapiens

<400> 228
Cys Cys Arg Asn Cys Tyr Glu His Glu Gly
1 5 10

<210> 229
<211> 10
<212> PRT
<213> Homo sapiens

<400> 229
Ser Ser Arg Thr Arg Arg Glu Thr Gln Leu
1 5 10

<210> 230
<211> 10
<212> PRT
<213> Homo sapiens

<400> 230
Arg Leu Gln Arg Arg Arg Glu Thr Gln Val
1 5 10

<210> 231
<211> 10
<212> PRT
<213> Homo sapiens

<400> 231
Trp Arg Arg Pro Arg Thr Glu Thr Gln Val

1 5 10

<210> 232
<211> 10
<212> PRT
<213> Homo sapiens

<400> 232
Trp Lys Pro Thr Arg Arg Glu Thr Glu Val
1 5 10

<210> 233
<211> 10
<212> PRT
<213> Homo sapiens

<400> 233
Arg Arg Thr Leu Arg Arg Glu Thr Gln Val
1 5 10

<210> 234
<211> 10
<212> PRT
<213> Homo sapiens

<400> 234
Arg Arg Leu Thr Arg Arg Glu Thr Gln Val
1 5 10

<210> 235
<211> 10
<212> PRT
<213> Homo sapiens

<400> 235
Arg Leu Arg Arg Arg Arg Glu Thr Gln Val
1 5 10

<210> 236
<211> 10
<212> PRT
<213> Homo sapiens

<400> 236
Arg Leu Gln Arg Arg Asn Glu Thr Gln Val
1 5 10

<210> 237
<211> 10
<212> PRT
<213> Homo sapiens

<400> 237
Arg Leu Gln Arg Arg Arg Val Thr Gln Val

1 5 10

<210> 238
<211> 10
<212> PRT
<213> Homo sapiens

<400> 238
Thr Ser Arg Glu Pro Arg Glu Ser Thr Val
1 5 10

<210> 239
<211> 10
<212> PRT
<213> Homo sapiens

<400> 239
Gln Arg Gln Ala Arg Ser Glu Thr Leu Val
1 5 10

<210> 240
<211> 10
<212> PRT
<213> Homo sapiens

<400> 240
Arg Leu Gln Arg Arg Arg Gln Thr Gln Val
1 5 10

<210> 241
<211> 10
<212> PRT
<213> Homo sapiens

<400> 241
Arg Leu Gln Arg Arg Arg Glu Thr Ala Leu
1 5 10

<210> 242
<211> 10
<212> PRT
<213> Homo sapiens

<400> 242
Thr Ser Arg Gln Ala Thr Glu Ser Thr Val
1 5 10

<210> 243
<211> 10
<212> PRT
<213> Homo sapiens

<400> 243
Arg Arg Arg Thr Arg Gln Glu Thr Gln Val

1 5 10

<210> 244
<211> 10
<212> PRT
<213> Homo sapiens

<400> 244
Arg Arg Arg Glu Ala Thr Glu Thr Gln Val
1 5 10

<210> 245
<211> 10
<212> PRT
<213> Homo sapiens

<400> 245
Arg Pro Arg Arg Gln Thr Glu Thr Gln Val
1 5 10

<210> 246
<211> 10
<212> PRT
<213> Homo sapiens

<400> 246
Arg His Thr Thr Ala Thr Glu Ser Ala Val
1 5 10

<210> 247
<211> 10
<212> PRT
<213> Homo sapiens

<400> 247
Thr Ser Arg Gln Ala Thr Glu Ser Thr Val
1 5 10

<210> 248
<211> 10
<212> PRT
<213> Homo sapiens

<400> 248
Arg Cys Trp Arg Pro Ser Ala Thr Val Val
1 5 10

<210> 249
<211> 10
<212> PRT
<213> Homo sapiens

<400> 249
Pro Pro Arg Gln Arg Ser Glu Thr Gln Val

1 5 10

<210> 250
<211> 24
<212> DNA
<213> Homo sapiens

<400> 250
aaaagatcta caatactatg gcgc 24

<210> 251
<211> 26
<212> DNA
<213> Homo sapiens

<400> 251
agggaattcc agacttaata ttatac 26

<210> 252
<211> 26
<212> DNA
<213> Homo sapiens

<400> 252
aaaggatcca ttttatgcac caaaag 26

<210> 253
<211> 28
<212> DNA
<213> Homo sapiens

<400> 253
atggaattct atctccatgc atgattac 28

<210> 254
<211> 26
<212> DNA
<213> Homo sapiens

<400> 254
gaggaattca ccacaatact atggcg 26

<210> 255
<211> 26
<212> DNA
<213> Homo sapiens

<400> 255
aggagatctc atacttaata ttatac 26

<210> 256
<211> 27
<212> DNA
<213> Homo sapiens

<400> 256
ttgagatctt cagcgtcgtt ggagtcg 27

<210> 257

<211> 26
<212> DNA
<213> Homo sapiens

<400> 257
aaagaattca ttttatgcac caaaag 26

<210> 258
<211> 28
<212> DNA
<213> Homo sapiens

<400> 258
atgggatcct atctccatgc atgattac 28

<210> 259
<211> 32
<212> DNA
<213> Homo sapiens

<400> 259
ctgggatcct catcaacgtg ttcttgatga tc 32

<210> 260
<211> 27
<212> DNA
<213> Homo sapiens

<400> 260
aagaaagctt tttatgcacc aaaagag 27

<210> 261
<211> 29
<212> DNA
<213> Homo sapiens

<400> 261
aatcaagctt tatctccatg catgattac 29

<210> 262
<211> 30
<212> DNA
<213> Homo sapiens

<400> 262
gctgaagctt tcaacgtgtt cttgatgatc 30

<210> 263
<211> 27
<212> DNA
<213> Homo sapiens

<400> 263
aagcgtcgac tttatgcacc aaaagag 27

<210> 264
<211> 29
<212> DNA
<213> Homo sapiens

<400> 264
aatgctcgag tatctccatg catgattac 29

<210> 265
<211> 30
<212> DNA
<213> Homo sapiens

<400> 265
gctgctcgag tcaacgtgtt cttgatgatc 30

<210> 266
<211> 26
<212> DNA
<213> Homo sapiens

<400> 266
agaagtcgac cacaatacta tggcgc 26

<210> 267
<211> 27
<212> DNA
<213> Homo sapiens

<400> 267
taggctcgag catacttaat attatac 27

<210> 268
<211> 28
<212> DNA
<213> Homo sapiens

<400> 268
cttgctcgag tcagcgtcgt tggagtcg 28

<210> 269
<211> 26
<212> DNA
<213> Homo sapiens

<400> 269
agaaaagctt cacaatacta tggcgc 26

<210> 270
<211> 27
<212> DNA
<213> Homo sapiens

<400> 270
tagaagcttg catacttaat attatac 27

<210> 271
<211> 28
<212> DNA
<213> Homo sapiens

<400> 271
cttgaagctt tcagcgtcgt tgaggtcg 28

<210> 272

<211> 225
<212> PRT
<213> Homo sapiens

<400> 272
Met Ser Pro Ile Leu Gly Tyr Trp Lys Ile Lys Gly Leu Val Gln Pro
 1   5   10   15
Thr Arg Leu Leu Leu Glu Tyr Leu Glu Glu Lys Tyr Glu Glu His Leu
            20   25   30
Tyr Glu Arg Asp Glu Gly Asp Lys Trp Arg Asn Lys Lys Phe Glu Leu
        35   40   45
Gly Leu Glu Phe Pro Asn Leu Pro Tyr Tyr Ile Asp Gly Asp Val Lys
    50   55   60
Leu Thr Gln Ser Met Ala Ile Ile Arg Tyr Ile Ala Asp Lys His Asn
65   70   75   80
Met Leu Gly Gly Cys Pro Lys Glu Arg Ala Glu Ile Ser Met Leu Glu
                85   90   95
Gly Ala Val Leu Asp Ile Arg Tyr Gly Val Ser Arg Ile Ala Tyr Ser
            100   105   110
Lys Asp Phe Glu Thr Leu Lys Val Asp Phe Leu Ser Lys Leu Pro Glu
        115   120   125
Met Leu Lys Met Phe Glu Asp Arg Leu Cys His Lys Thr Tyr Leu Asn
    130   135   140
Gly Asp His Val Thr His Pro Asp Phe Met Leu Tyr Asp Ala Leu Asp
145   150   155   160
Val Val Leu Tyr Met Asp Pro Met Cys Leu Asp Ala Phe Pro Lys Leu
                165   170   175
Val Cys Phe Lys Lys Arg Ile Glu Ala Ile Pro Gln Ile Asp Lys Tyr
            180   185   190
Leu Lys Ser Ser Lys Tyr Ile Ala Trp Pro Leu Gln Gly Trp Gln Ala
        195   200   205
Thr Phe Gly Gly Gly Asp His Pro Pro Lys Ser Asp Leu Ile Glu Gly
    210   215   220
Arg
225

<210> 273
<211> 24
<212> DNA
<213> Homo sapiens

<400> 273
aatggggatc cagctcatta aagg   24

<210> 274
<211> 24
<212> DNA
<213> Homo sapiens

<400> 274
atacatactt gtggaattcg ccac   24

<210> 275
<211> 26
<212> DNA
<213> Homo sapiens

<400> 275
cacggatccc ttctgagttg aaaggc   26

<210> 276
<211> 30
<212> DNA
<213> Homo sapiens

<400> 276
tatgaattcc atctggatca aaaggcaatg 30

<210> 277
<211> 30
<212> DNA
<213> Homo sapiens

<400> 277
cagggatcca aagagttgaa attcacaagc 30

<210> 278
<211> 27
<212> DNA
<213> Homo sapiens

<400> 278
acggaattct gcagcgactg ccgcgtc 27

<210> 279
<211> 23
<212> DNA
<213> Homo sapiens

<400> 279
aggatccaga tgtcctacat ccc 23

<210> 280
<211> 23
<212> DNA
<213> Homo sapiens

<400> 280
ggaattcatg gactgctgca cgg 23

<210> 281
<211> 28
<212> DNA
<213> Homo sapiens

<400> 281
agagaattct cgagatgtcc tacatccc 28

<210> 282
<211> 27
<212> DNA
<213> Homo sapiens

<400> 282
tgggaattcc taggacagca tggactg 27

<210> 283
<211> 25
<212> DNA

<213> Homo sapiens

<400> 283
ctaggatccg ggccagccgg tcacc 25

<210> 284
<211> 29
<212> DNA
<213> Homo sapiens

<400> 284
gacggatccc cctgctgcac ggccttctg 29

<210> 285
<211> 29
<212> DNA
<213> Homo sapiens

<400> 285
gacgaattcc cctgctgcac ggccttctg 29

<210> 286
<211> 25
<212> DNA
<213> Homo sapiens

<400> 286
ctagaattcg ggccagccgg tcacc 25

<210> 287
<211> 82
<212> PRT
<213> Homo sapiens

<400> 287
Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Val
1 5 10 15
Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr Lys Ile
20 25 30
Ile Glu Gly Gly Ala Ala His Lys Asp Gly Lys Leu Gln Ile Gly Asp
35 40 45
Lys Leu Leu Ala Val Asn Asn Val Cys Leu Glu Glu Val Thr His Glu
50 55 60
Glu Ala Val Thr Ala Leu Lys Asn Thr Ser Asp Phe Val Tyr Leu Lys
65 70 75 80
Val Ala

<210> 288
<211> 101
<212> PRT
<213> Homo sapiens

<400> 288
Pro Ser Glu Leu Lys Gly Lys Phe Ile His Thr Lys Leu Arg Lys Ser
1 5 10 15
Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu Pro Asp Glu
20 25 30
Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala Ala Leu Asp

```
        35                  40                  45
Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn Asp Thr Cys
    50                  55                  60
Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe Gln Ser Ile
65                  70                  75                  80
Pro Ile Gly Ala Ser Val Asp Leu Glu Leu Cys Arg Gly Tyr Pro Leu
                85                  90                  95
Pro Phe Asp Pro Asp
            100
```

<210> 289
<211> 102
<212> PRT
<213> Homo sapiens

<400> 289

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Gln Arg Val Glu Ile His Lys Leu Arg Gln Gly Glu Asn Leu Ile Leu
 1               5                  10                  15
Gly Phe Ser Ile Gly Gly Gly Ile Asp Gln Asp Pro Ser Gln Asn Pro
            20                  25                  30
Phe Ser Glu Asp Lys Thr Asp Lys Gly Ile Tyr Val Thr Arg Val Ser
        35                  40                  45
Glu Gly Gly Pro Ala Glu Ile Ala Gly Leu Gln Ile Gly Asp Lys Ile
    50                  55                  60
Met Gln Val Asn Gly Trp Asp Met Thr Met Val Thr His Asp Gln Ala
65                  70                  75                  80
Arg Lys Arg Leu Thr Lys Arg Ser Glu Glu Val Val Arg Leu Leu Val
                85                  90                  95
Thr Arg Gln Ser Leu Gln
            100
```

<210> 290
<211> 122
<212> PRT
<213> Homo sapiens

<400> 290

```
Met Ser Tyr Ile Pro Gly Gln Pro Val Thr Ala Val Val Gln Arg Val
 1               5                  10                  15
Glu Ile His Lys Leu Arg Gln Gly Glu Asn Leu Ile Leu Gly Phe Ser
            20                  25                  30
Ile Gly Gly Gly Ile Asp Gln Asp Pro Ser Gln Asn Pro Phe Ser Glu
        35                  40                  45
Asp Lys Thr Asp Lys Gly Ile Tyr Val Thr Arg Val Ser Glu Gly Gly
    50                  55                  60
Pro Ala Glu Ile Ala Gly Leu Gln Ile Gly Asp Lys Ile Met Gln Val
65                  70                  75                  80
Asn Gly Trp Asp Met Thr Met Val Thr His Asp Gln Ala Arg Lys Arg
                85                  90                  95
Leu Thr Lys Arg Ser Glu Glu Val Val Arg Leu Leu Val Thr Arg Gln
            100                 105                 110
Ser Leu Gln Lys Ala Val Gln Gln Ser Met
        115                 120
```

<210> 291
<211> 125
<212> PRT

<213> Homo sapiens

<400> 291
Glu Met Ser Tyr Ile Pro Gly Gln Pro Val Thr Ala Val Val Gln Arg
 1   5   10   15
Val Glu Ile His Lys Leu Arg Gln Gly Glu Asn Leu Ile Leu Gly Phe
            20   25   30
Ser Ile Gly Gly Gly Ile Asp Gln Asp Pro Ser Gln Asn Pro Phe Ser
        35   40   45
Glu Asp Lys Thr Asp Lys Gly Ile Tyr Val Thr Arg Val Ser Glu Gly
    50   55   60
Gly Pro Ala Glu Ile Ala Gly Leu Gln Ile Gly Asp Lys Ile Met Gln
65   70   75   80
Val Asn Gly Trp Asp Met Thr Met Val Thr His Asp Gln Ala Arg Lys
                85   90   95
Arg Leu Thr Lys Arg Ser Glu Glu Val Val Arg Leu Leu Val Thr Arg
            100   105   110
Gln Ser Leu Gln Lys Ala Val Gln Gln Ser Met Leu Ser
        115   120   125

<210> 292
<211> 117
<212> PRT
<213> Homo sapiens

<400> 292
Pro Gly Gln Pro Val Thr Ala Val Val Gln Arg Val Glu Ile His Lys
 1   5   10   15
Leu Arg Gln Gly Glu Asn Leu Ile Leu Gly Phe Ser Ile Gly Gly Gly
            20   25   30
Ile Asp Gln Asp Pro Ser Gln Asn Pro Phe Ser Glu Asp Lys Thr Asp
        35   40   45
Lys Gly Ile Tyr Val Thr Arg Val Ser Glu Gly Gly Pro Ala Glu Ile
    50   55   60
Ala Gly Leu Gln Ile Gly Asp Lys Ile Met Gln Val Asn Gly Trp Asp
65   70   75   80
Met Thr Met Val Thr His Asp Gln Ala Arg Lys Arg Leu Thr Lys Arg
                85   90   95
Ser Glu Glu Val Val Arg Leu Leu Val Thr Arg Gln Ser Leu Gln Lys
            100   105   110
Ala Val Gln Gln Ser
        115

<210> 293
<211> 72
<212> PRT
<213> Homo sapiens

<400> 293
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser

65 70

<210> 294
<211> 76
<212> PRT
<213> Homo sapiens

<400> 294
Phe Ile His Thr Lys Leu Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr
1 5 10 15
Val Val Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu
20 25 30
Val Leu Asp Gly Pro Ala Ala Leu Asp Gly Lys Met Glu Thr Gly Asp
35 40 45
Val Ile Val Ser Val Asn Asp Thr Cys Val Leu Gly His Thr His Ala
50 55 60
Gln Val Val Lys Ile Phe Gln Ser Ile Pro Ile Gly
65 70 75

<210> 295
<211> 85
<212> PRT
<213> Homo sapiens

<400> 295
Phe Ile His Thr Lys Leu Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr
1 5 10 15
Val Val Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu
20 25 30
Val Leu Asp Gly Pro Ala Ala Leu Asp Gly Lys Met Glu Thr Gly Asp
35 40 45
Val Ile Val Ser Val Asn Asp Thr Cys Val Leu Gly His Thr His Ala
50 55 60
Gln Val Val Lys Ile Phe Gln Ser Ile Pro Ile Gly Ala Ser Val Asp
65 70 75 80
Leu Glu Leu Cys Arg
85

<210> 296
<211> 78
<212> PRT
<213> Homo sapiens

<400> 296
Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu Pro
1 5 10 15
Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala Ala
20 25 30
Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn Asp
35 40 45
Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe Gln
50 55 60
Ser Ile Pro Ile Gly Ala Ser Val Asp Leu Glu Leu Cys Arg
65 70 75

<210> 297

<211> 88
<212> PRT
<213> Homo sapiens

<400> 297
Phe Ile His Thr Lys Leu Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr
 1   5   10   15
Val Val Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu
            20   25   30
Val Leu Asp Gly Pro Ala Ala Leu Asp Gly Lys Met Glu Thr Gly Asp
        35   40   45
Val Ile Val Ser Val Asn Asp Thr Cys Val Leu Gly His Thr His Ala
    50   55   60
Gln Val Val Lys Ile Phe Gln Ser Ile Pro Ile Gly Ala Ser Val Asp
65   70   75   80
Leu Glu Leu Cys Arg Gly Tyr Pro
                85

<210> 298
<211> 88
<212> PRT
<213> Homo sapiens

<400> 298
Lys Gly Lys Phe Ile His Thr Lys Leu Arg Lys Ser Ser Arg Gly Phe
 1   5   10   15
Gly Phe Thr Val Val Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Ile
            20   25   30
Lys Ser Leu Val Leu Asp Gly Pro Ala Ala Leu Asp Gly Lys Met Glu
        35   40   45
Thr Gly Asp Val Ile Val Ser Val Asn Asp Thr Cys Val Leu Gly His
    50   55   60
Thr His Ala Gln Val Val Lys Ile Phe Gln Ser Ile Pro Ile Gly Ala
65   70   75   80
Ser Val Asp Leu Glu Leu Cys Arg
                85

<210> 299
<211> 81
<212> PRT
<213> Homo sapiens

<400> 299
Lys Gly Lys Phe Ile His Thr Lys Leu Arg Lys Ser Ser Arg Gly Phe
 1   5   10   15
Gly Phe Thr Val Val Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Ile
            20   25   30
Lys Ser Leu Val Leu Asp Gly Pro Ala Ala Leu Asp Gly Lys Met Glu
        35   40   45
Thr Gly Asp Val Ile Val Ser Val Asn Asp Thr Cys Val Leu Gly His
    50   55   60
Thr His Ala Gln Val Val Lys Ile Phe Gln Ser Ile Pro Ile Gly Ala
65   70   75   80
Ser

<210> 300

<211> 94
<212> PRT
<213> Homo sapiens

<400> 300
Glu Leu Lys Gly Lys Phe Ile His Thr Lys Leu Arg Lys Ser Ser Arg
 1   5   10   15
Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu Pro Asp Glu Phe Leu
            20   25   30
Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala Ala Leu Asp Gly Lys
        35   40   45
Met Glu Thr Gly Asp Val Ile Val Ser Val Asn Asp Thr Cys Val Leu
    50   55   60
Gly His Thr His Ala Gln Val Val Lys Ile Phe Gln Ser Ile Pro Ile
65   70   75   80
Gly Ala Ser Val Asp Leu Glu Leu Cys Arg Gly Tyr Pro Leu
                85   90

<210> 301
<211> 99
<212> PRT
<213> Homo sapiens

<400> 301
Ser Glu Leu Lys Gly Lys Phe Ile His Thr Lys Leu Arg Lys Ser Ser
 1   5   10   15
Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu Pro Asp Glu Phe
            20   25   30
Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala Ala Leu Asp Gly
        35   40   45
Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn Asp Thr Cys Val
    50   55   60
Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe Gln Ser Ile Pro
65   70   75   80
Ile Gly Ala Ser Val Asp Leu Glu Leu Cys Arg Gly Tyr Pro Leu Pro
                85   90   95
Phe Asp Pro

<210> 302
<211> 72
<212> PRT
<213> Homo sapiens

<400> 302
Arg Lys Ser Ala Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 303

<211> 72
<212> PRT
<213> Homo sapiens

<400> 303
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Glu Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 304
<211> 72
<212> PRT
<213> Homo sapiens

<400> 304
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Leu Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 305
<211> 72
<212> PRT
<213> Homo sapiens

<400> 305
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ser Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 306
<211> 72
<212> PRT
<213> Homo sapiens

<400> 306
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu

```
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Arg Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 307
<211> 72
<212> PRT
<213> Homo sapiens

<400> 307

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ala Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 308
<211> 72
<212> PRT
<213> Homo sapiens

<400> 308

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Glu Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 309
<211> 72
<212> PRT
<213> Homo sapiens

<400> 309

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Leu Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
```

50 55 60
Gln Ser Ile Pro Ile Gly Ala Ser
65 70

<210> 310
<211> 72
<212> PRT
<213> Homo sapiens

<400> 310
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
1 5 10 15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
20 25 30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
35 40 45
Asp Thr Cys Val Leu Gly His Thr His Ser Gln Val Val Lys Ile Phe
50 55 60
Gln Ser Ile Pro Ile Gly Ala Ser
65 70

<210> 311
<211> 72
<212> PRT
<213> Homo sapiens

<400> 311
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
1 5 10 15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
20 25 30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
35 40 45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Leu Phe
50 55 60
Gln Ser Ile Pro Ile Gly Ala Ser
65 70

<210> 312
<211> 72
<212> PRT
<213> Homo sapiens

<400> 312
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
1 5 10 15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
20 25 30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
35 40 45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
50 55 60
Gln Ser Ile Pro Ile Gly Ser Ser
65 70

<210> 313

<211> 72
<212> PRT
<213> Homo sapiens

<400> 313
Arg Lys Ser Thr Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 314
<211> 72
<212> PRT
<213> Homo sapiens

<400> 314
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Gly Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 315
<211> 72
<212> PRT
<213> Homo sapiens

<400> 315
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Ala Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 316
<211> 72
<212> PRT
<213> Homo sapiens

<400> 316
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu

```
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Ala Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 317
<211> 72
<212> PRT
<213> Homo sapiens

<400> 317

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Ala Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 318
<211> 72
<212> PRT
<213> Homo sapiens

<400> 318

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Ala Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 319
<211> 72
<212> PRT
<213> Homo sapiens

<400> 319

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Ala Val Lys Ile Phe
```

```
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 320
<211> 72
<212> PRT
<213> Homo sapiens

<400> 320
```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Ala Ile Gly Ala Ser
65                  70
```

<210> 321
<211> 72
<212> PRT
<213> Homo sapiens

<400> 321
```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ala
65                  70
```

<210> 322
<211> 72
<212> PRT
<213> Homo sapiens

<400> 322
```
Arg Lys Ser Ser Ser Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 323

<211> 72
<212> PRT
<213> Homo sapiens

<400> 323
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Leu Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 324
<211> 72
<212> PRT
<213> Homo sapiens

<400> 324
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Thr Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 325
<211> 72
<212> PRT
<213> Homo sapiens

<400> 325
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1   5   10   15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20   25   30
Gly Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35   40   45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50   55   60
Gln Ser Ile Pro Ile Gly Ala Ser
65   70

<210> 326
<211> 72
<212> PRT
<213> Homo sapiens

<400> 326
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu

```
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Ser Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 327
<211> 72
<212> PRT
<213> Homo sapiens

<400> 327

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Lys
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 328
<211> 72
<212> PRT
<213> Homo sapiens

<400> 328

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Phe His Thr His Ala Gln Val Val Lys Ile Phe
    50                  55                  60
Gln Ser Ile Pro Ile Gly Ala Ser
65                  70
```

<210> 329
<211> 72
<212> PRT
<213> Homo sapiens

<400> 329

```
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
 1               5                  10                  15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
            20                  25                  30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
        35                  40                  45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Asn Val Lys Ile Phe
```

50 55 60
Gln Ser Ile Pro Ile Gly Ala Ser
65 70

<210> 330
<211> 72
<212> PRT
<213> Homo sapiens

<400> 330
Arg Lys Ser Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu
1 5 10 15
Pro Asp Glu Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala
20 25 30
Ala Leu Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn
35 40 45
Asp Thr Cys Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe
50 55 60
Gln Ser Ile Pro Ile Ser Ala Ser
65 70